

NATIONAL BIOTERRORISM HOSPITAL PREPAREDNESS PROGRAM

FY 2004 Continuation Guidance

Application Due Date: July 1, 2004
CFDA # 93.003

Authority: Section 319C-1 of the Public Health Service (PHS) Act

U.S. Department of Health and Human Services
Health Resources and Services Administration
Special Programs Bureau

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FY 2004 Continuation Guidance

INTRODUCTION

The purpose of this continuation guidance is to:

1. Provide updated information on critical benchmarks,
2. Introduce Minimal Levels of Readiness,
3. Describe certain activities that awardees should focus their efforts and resources on for the upcoming budget period, and
4. Issue Sentinel Indicators that all awardees will report on to show progress in achieving critical benchmarks.

Awardees will note that there are no optional benchmarks this year. Benchmarks are critical milestones in determining the preparedness of the Nation's health care system.

Awardees are reminded that funds provided under this cooperative agreement must be obligated in a timely and efficient manner to ensure that hospitals, EMS systems, Poison Control Centers and other sub-recipients are allowed the maximum time and resources to achieve critical benchmarks and Minimal Levels of Readiness.

LEGISLATIVE AUTHORITY AND ELIGIBLE ENTITIES

To follow up on the emergency bioterrorism legislation in fiscal year (FY) 2002 through the Public Health and Social Services Emergency Fund, Congress authorized a continuing response to bioterrorism and other public health emergencies in June 2002. The *Public Health Security and Bioterrorism Preparedness and Response Act of 2002* (Public Law 107-188) enacts Section 319C-1 of the Public Health Service Act (42 U.S.C. 247d-3a), which supports activities related to countering potential terrorist threats to civilian populations. Funding is provided under the *Consolidated Appropriations Act, 2004* (Public Law 108-199).

Only current grantees under this program are eligible to apply for continuation funding. Grantees will be notified as to their FY 2004 funding amount in a cover letter. The distribution of funds will be to the health departments of all 50 States, the District of Columbia, the Nation's three largest municipalities (New York City, Chicago and Los Angeles County), the Commonwealths of Puerto Rico and the Northern Mariana Islands, the territories of American Samoa, Guam and the U.S. Virgin Islands, the

Federated States of Micronesia, and the Republics of Palau and the Marshall Islands. Hospitals, EMS systems, outpatient facilities and poison control centers should work with the appropriate health department for funding through this program.

Eligible applicants from the Pacific Basin Territories and Nations may cooperate in a consortium arrangement to submit a single application, pooling funds to develop a larger regional plan where economies of scale might make this more practical. Under such an arrangement, one of the applicants must be the awardee of record, with responsibility to oversee the funds directed toward the other participants.

The administrative and funding instrument to be used for this program will be the cooperative agreement, in which substantial HRSA programmatic collaboration with awardees is anticipated during the performance of the project. Under the cooperative agreement, HRSA will support activities of awardees through a memorandum of agreement.

MINIMAL LEVELS OF READINESS

Minimal Levels of Readiness have been established as a means to ultimately achieve critical benchmarks. Applicants will note that some minimal levels of readiness are the actual benchmarks themselves, due to the fact that the benchmark is the minimum standard that must be achieved to demonstrate readiness. For other benchmarks, minimal levels of readiness will represent a phased approach to ultimate attainment of the critical benchmark.

All critical benchmarks must be achieved by the end of the project period (August 31, 2007). Certain Minimal Levels of Readiness may be able to be achieved within a twelve-month budget period; others will be phased in over a number of budget periods.

HRSA recognizes some awardees will be able to demonstrate that the Minimal Level of Readiness has been met for certain benchmarks. If the Minimal Level of Readiness has been achieved, awardees will submit the required documents as outlined. Awardees will then propose further activities that will enhance the current capabilities of the awardee

SENTINEL INDICATORS

In addition to adding Minimal Levels of Readiness, HRSA has added a set of National Bioterrorism Hospital Preparedness Program (NBHPP) sentinel indicators. These indicators relate directly to the critical benchmarks. For all but one of the critical benchmarks, there is an indicator requesting data or information for that benchmark. Awardees are asked to report retrospectively on each of these indicators in the 2004 application regarding progress made towards achieving the benchmark prior to and during the 2003 grant year.

While it is recognized that awardees will be reporting on less than a full 12-month period, it is important nonetheless to report all progress made during the 2003 grant year up to the application date in order to

demonstrate what awardees have accomplished. Awardees should be assured that reporting retrospectively will in no way negatively impact on the financial awards that states receive.

Data for each of the indicators should be presented at the end of the description of activities listed for the associated benchmark. Awardees will be asked to report progress on these indicators annually.

SUBMISSION REQUIREMENTS

Outline for Continuation Application

All applications are to be submitted in the following order:

- PHS -5161-1
- Table of Contents
- HRSA Priority Areas and Critical Benchmarks
 - Sentinel Indicator Data Associated with each Benchmark
- HRSA Budget Narrative Justification

Applicants will provide the following information for all HRSA Critical Benchmarks:

1. A brief (1 page) update of activities proposed in the FY 2003 funding application for each benchmark.
2. The proposed activities and associated timeline for achieving activities during the FY 2004 budget period.
3. Retrospective sentinel indicator data for each benchmark.
4. The proposed allocation for each benchmark.
5. Anticipated obstacles to implementing the activities or timeline for the benchmark and how the state will address them to ensure success in meeting activities and timeline as outlined.

Forms

Public Health Service Form 5161-1 (PHS Form 5161-1) can be viewed and downloaded from <ftp://ftp.hrsa.gov/mchb/grants2003/phs5161-1.doc>.

Item 10 on this form should reference Catalog of Federal Domestic Assistance (CFDA) Number 93.003. Please note that the forms are pre-fillable, all forms must be filled in, signed where appropriate and submitted with the application.

Addresses for Submission

Applications must be postmarked by close of business on **July 1, 2004**. All applications are to be submitted electronically to the HRSA project officer.

The original and 1 copy of the application must be submitted to HRSA via the HRSA Grants Application Center:

The HRSA Grants Application Center (GAC)
The Legin Group, Inc.
Attn: National Bioterrorism Hospital Preparedness Program
CFDA No. 93.003
901 Russell Avenue, Suite 450
Gaithersburg, MD 20879
Telephone: 877-477-2123

All awardees are to send an electronic copy of the application to the Office of the Assistant Secretary for Public Health Emergency Preparedness:

Ms. Lara Lamprecht
Office of State and Local Preparedness
Office of the Assistant Secretary for Public Health Emergency Preparedness
(202) 260-1198
E-mail address: CDCHRSA.workplans@hhs.gov

DUNS Number

Beginning October 1, 2003, applicants are required to have a Data Universal Numbering System (DUNS) number to apply for a grant or cooperative agreement from the Federal Government. Go to the following website for detailed information on how to obtain a DUNS number: <http://www.hrsa.gov/grants/duns.htm>

In addition, to do business with the U.S. Government, including electronically applying for HRSA grants, your organization must register with the Central Contractor Registry (CCR). CCR Registration enables you to easily provide information about your organization, clarify where government payments to your organization should be made and make a change in one place and one time for all federal agencies to use. Go to the following website for detailed information on how to register: <http://www.hrsa.gov/grants/ccr.htm>

REVIEW CRITERIA

Applications will be reviewed by committees within both HRSA and the Office of the Secretary, Department of Health and Human Services (DHHS). If the applications fulfill the review criteria, awards will be made by September 1, 2004. If recommendations from these reviews result in conditions of award, the conditions will need to be addressed when the applicant receives the Notice of Grant Award (NGA).

Applications will be reviewed based on the following criteria:

- Extent to which the plan relates to identified needs
- Extent to which terrorism preparedness issues are prioritized and addressed based on available funds
- Extent to which requests for staffing, equipment and capital improvements relate to sustainable program goals
- Extent to which objectives are measurable, achievable, and sustainable
- Extent to which the work plan meets benchmark requirements in a high-quality manner
- Extent to which proposed objectives are an extension of activities started during FY 2003 and can be accomplished within one year
- Extent to which the needs of pediatrics and other vulnerable populations are addressed in the plan
- Extent to which terrorism disaster exercises feed back to revisions of the plan
- Clarity of budget and narrative justification, as well as the budget being presented on the approved HRSA template

HRSA PRIORITIES AND CRITICAL BENCHMARKS

PRIORITY AREA #1: ADMINISTRATION

Critical Benchmark #1: Financial Accountability

Develop and maintain a financial accounting system capable of tracking expenditures by critical benchmark and by funds allocated to hospitals and other health care entities.

It is essential to ensure accountability for the considerable funds that have been and are being awarded to health departments through the HRSA cooperative agreements. Accountability has been and will continue to be an issue of high priority across all levels of the federal government. Consequently, public health departments are required to track expenditures funded under this cooperative agreement by Critical Benchmark and by type of entities receiving these funds.

During the FY 2004 budget period, special emphasis must be placed on the expedient obligation and subsequent transfer of the cooperative-agreement funds from the awardee to the sub-recipient level. Awardees are encouraged to use all means necessary to ensure that these federal funds are awarded to sub-recipients as soon as possible to prevent further delays in funding to the local level.

Awardees are also reminded that certain federal regulations and financial guidelines govern these funds, as noted in the official Notice of Grant Award (NGA). These guidelines include A-133 audit requirements, adherence to 45 CFR part 74 or 92, as applicable, as well as ensuring that sub-recipients are aware of and adhere to these policies as well.

The HHS Office of the Inspector General (OIG) will be conducting a series of audits of the awardee jurisdictions to evaluate the state health department's timeliness in moving these funds from the awardee agency to the intended subrecipients.

Minimal Level of Readiness

Awardees will expedite the obligation and flow of funds to intended sub-recipients in order to achieve the prescribed HRSA Critical Benchmarks and Minimal Levels of Readiness.

To demonstrate compliance with the minimal level of readiness, awardees will report on the funds allocated to each Critical Benchmark and Type of Entity via:

1. HRSA Budget Template
2. Application format
3. Semi-annual progress report format

4. Interim Financial Status Reports (FSR's) submitted on a quarterly basis as well as a final FSR at the end of the budget period. These FSR's will document awardee ability to obligate as well as liquidate cooperative-agreement funds.

PRIORITY AREA #2: REGIONAL SURGE CAPACITY FOR THE CARE OF ADULT AND PEDIATRIC VICTIMS OF TERRORISM AND OTHER PUBLIC HEALTH EMERGENCIES

Critical Benchmark #2-1: Surge Capacity: Beds

Establish a system that allows the triage, treatment and initial stabilization of 500 adult and pediatric patients per 1,000,000 awardee jurisdiction (1:2000), above the current daily staffed bed capacity, with acute illnesses or trauma requiring hospitalization from a chemical, biological, radiological, nuclear or explosive (CBRN&E) incident.

Awardee	Population	Surge beds/Patients	Current Daily Capacity	% Increase
State A	5,595,211	2,798	19,257	15%
State B	11,353,140	5,677	33,310	17%
State C	20,851,820	10,426	56,354	19%

Example not actual or current data

HRSA expects that awardees will use the ratio in the benchmark to determine the numbers of adults and pediatrics to plan for based on the percentage each of those populations represent in the state, territory or municipality.

The aftermath of a major bioterrorist incident and its affects on the underpinnings of our society would be almost unbelievable. Designing a healthcare delivery system to care for thousands or even hundreds of thousands of patients or victims when the current healthcare system is overwhelmed poses an overwhelming task for any state, regional or city planner. The intent of this critical benchmark in conjunction with the others for surge capacity is to provide a framework for developing a unified comprehensive system of response that meets the needs of a state, city or local community, to provide the most good for the greatest number of people while using limited resources and integrates easily into the Federal Response Plan.

Awardees should recognize that, for a bioterrorism incident or other types of public health emergencies, surge capacity and all of its components would be the limiting factor. For example, the response to an outbreak of botulism through food or beverage contamination with botulinum toxin, whether terrorist-induced or accidental, most likely would be limited by the individual or collective capacity of the hospitals in the affected municipality or sub-state region to provide intensive respiratory care the demand for which could be several hundred percent above current baseline service levels. In a similar fashion, capacity to provide more than palliative care to survivors of a incident involving a radiologic dispersal device or a nuclear explosion could be limited by the availability of decorporation agents and expertise regarding their use.

In large-scale disasters, state, regional and city leaders will be forced to confront difficult issues, many of which are addressed in this guidance. In light of the fact that not all issues will apply to all regions, this guidance is intended as a starting point to develop plans, relationships, and procedures specific to respective jurisdictions. Awardees may find it necessary to devote more resources to some areas while scaling back others. The overarching objective is to use available resources to provide a caring and safe environment for victims of a mass casualty event.

Critical Benchmarks 2-1 and 2-3 are essential elements of this guidance, taken together, they define the order of magnitude of surge capacity for beds and healthcare workers, respectively, (i.e., 15-20% above baseline service levels) that almost certainly would be needed to counter a major public health emergency. Remembering that this is not an attempt to define full hospital preparedness, as mentioned previously, one can envision terrorism scenarios that will prompt even greater burdens upon the healthcare system. However, HRSA believes that these Critical Benchmarks will move our nation's healthcare system toward establishing the level of surge capacity, which realistically can be achieved during this upcoming Project Period.

This system must address all components of the awardees health care system. Under the authorizing legislation, priority must be given to biological events before using these funds for chemical, radiological, nuclear or explosive incident planning.

Preparedness planning must address not only enhancing the surge capacity of individual health care entities, but also establishing mutual aid agreements among them. Where appropriate, the applicant should develop and implement intra-state or multi-state regional workplans to maximize economies of scale in planning for an overwhelming terrorist incident or other public health emergency. Awardees must consider and include off-site options for increasing bed capacity such as mobile facilities, temporary facilities appropriate to an austere environment, large convention halls, armories, and State fair grounds. Additionally, the plan must account for the operational and physical needs of special populations; notably people with physical disabilities, geriatrics, and the mentally ill to the extent possible.

Awardees must identify the major rural and urban priorities to be implemented in the planning process, so that both rural communities and metropolitan areas are engaged and coordinated to the fullest extent possible. Funded Municipalities planning for a large-scale event must include the surrounding areas likely to impact municipal resources. Conversely, in the event of an urban event, rural areas must include planning to deal with the sudden influx of potential patients into rural facilities caused by large-scale evacuation in the urban area.

Funded Territories and jurisdictions with geographically remote areas should identify any unusual circumstance that will require special procedures (such as evacuation or equipment availability) due to the geographic location. Where appropriate, the applicant should develop and implement intra-state or multi-state regional preparedness plans to maximize economies of scale in resource planning and isolation.

The surge bed ratio was derived from a variety of sources: National Disaster Medical System (NDMS) projections, data from established Trauma regions/systems, and systems developed for Mass Casualty

Incidents (MCI) in other countries (e.g., Israel). With the understanding that there were no health care specific Bioterrorism specific models at the time, excluding the DOD (NBC-CREST), the ratio of “500 patients per million (1,000,000) population (1:2000)” is based on much of the currently available models of health care delivery and extrapolations from those systems of care. The majority of the examples of MCI models were based on ranges 100-300/per million expanded to 300-600/per million (NDMS) or in the case of the Israeli system 15-20% above current capacity. Since all CBMs must be measurable for programmatic evaluation, ranges previously mentioned provide too much inconsistency and are difficult to quantify from the perspective of planning. Therefore, the number is fixed at a set ratio of 500 per 1,000,000. This represents the best available combination of data and expert judgment.

For further information regarding regionalization and surge capacity, please refer to AHRQ Evidenced Report “Regionalization of Bioterrorism Preparedness and Response” prepared by Stanford-UCSF Evidenced Based Practice Center.

Minimal Level of Readiness

Awardees will have systems in place that allow the triage, treatment and initial stabilization of 500 adult and pediatric patients per 1,000,000 awardee jurisdiction (1:2000), above the current daily bed capacity, for victims of a chemical, biological, radiological, nuclear or explosive (CBRN&E) incident.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. An executive summary of no more than five pages summarizing the current system/plan.
2. An inventory of surge beds by awardee identified region (as identified in the FY 2003 funding application) providing appropriate population demographic information for verification.
3. An electronic copy of the awardee’s plan or examples of regional plans that are currently in place and operational within the awardee’s jurisdiction.

Sentinel Indicator #2-1

Number of beds which awardee is capable of surging beyond the current staffed bed capacity in a 24 hour period.

Critical Benchmark #2-2: Surge Capacity: Isolation Capacity

Ensure that all participating hospitals have the capacity to maintain, in negative pressure isolation, at least one suspected case of a highly infectious disease (e.g., small pox, pneumonic plague, SARS, Influenza and hemorrhagic fevers) or for any febrile patient with a suspect rash or other symptoms of concern who might possibly be developing a potentially highly communicable disease.

In addition, the awardee must identify at least one regional healthcare facility in each awardee hospital preparedness region as defined by the awardee’s FY 2003 work plan that is able to support the initial evaluation and treatment of at least 10 adult and pediatric patients at a time in negative pressure isolation.

Ideally, the negative pressure isolation room should be placed in or adjacent to the Emergency Department, if one is available. This capacity does not have to be a permanent infrastructure upgrade and can involve temporary or portable systems. These upgrades must be in compliance with all local, state and federal laws, statutes and regulations governing negative pressure isolation rooms.

Regional isolation facilities should ideally be placed in close proximity to transportation hubs (e.g., airports, sea ports, major interstate highways and state or jurisdictional boundaries) to facilitate the accommodation of large population centers.

Upgrades associated with retrofitting current facilities are allowable.

Minimal Level of Readiness

1. Seventy-five percent of participating hospitals have the capacity to maintain at least one suspect highly infectious disease case in negative pressure isolation.
2. Seventy-five percent of awardee regions will have identified and upgraded (if needed) regional healthcare facilities that can support the initial evaluation and treatment of at least 10 adult and pediatric patients at a time in negative pressure isolation.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. An inventory of all **hospital based** negative-pressure isolation capacity, to include number of patients that can be accommodated, within the awardee jurisdiction.
2. An inventory of all **regional** negative-pressure isolation capacity, to include number of patients that can be accommodated within the awardee jurisdiction.
3. The total number of participating hospitals.

Sentinel Indicator #2-2

Number of patients awardee has capability to hold in negative-pressure isolation above current daily capacity for airborne diseases, during a declared state/local/regional public health emergency.

Critical Benchmark #2-3: Surge Capacity: Health Care Personnel

Establish a response system that allows the immediate deployment of additional health care personnel in support of surge bed capacity noted in Critical Benchmark # 2-1. The number of health care personnel must be linked to already established patient care ratios noted by the awardee's Patient Care Practice Acts based on 24 hours operations.

This benchmark must describe how these personnel are recruited, received, processed and managed through the incident in accordance with the awardee system noted in CB #2-1.

According to the *Concept of Operations for the Acute Care Center (ACC CONOPS)*, "the potentially immense number of patients seeking treatment will cause hospitals to fill beyond their current capacity,

requiring them to engage all their available staff. Planning for this benchmark will require either personnel from nearby hospitals, possibly temporary staffing agencies, or more likely, other state and federal assets, (e.g., Disaster Medical Assistance Teams (DMATs)). The issue of finding adequate numbers of health care personnel to provide care is one that requires resourceful pre-planning. However, this planning must be predicated on the assumption that federal assets will **not** be initially available.”

“Local hospitals and communities will need to negotiate mutual aid agreements that specify where additional staff is obtained while awaiting the arrival of other local, state and Federal resources. It is not expected that an affected community will have the extra staff resources to act independently. Clearly, the majority of personnel will have to come from outside the affected regional area.” Another resource for assisting in coordinating procurement of additional staff in an emergency, particularly in the areas of epidemiology, nurses and patient transport is the local public health agency. A continued effort to coordinate planning between public health and hospitals remains a priority for the HRSA cooperative agreement program.

“Potential types of health care personnel who will need to be available include physicians, nurses, emergency medical technicians, dentists and pharmacists who may not have current inpatient care experience or who are still in training. To ensure that these resources operate in conjunction with the supporting hospitals, planners must consider distributing some of the hospital’s regular staff amid the temporary personnel. This is advantageous because it provides a base of personnel that have current operational information and skill sets.”

“The nature of the healthcare needs and the shortage of personnel in a bioterrorist or mass casualty incident may make established role delineation impractical. Therefore, divisions of responsibilities for various aspects of patient care and administration should be based on knowledge, experience, special talents, and to some level, the interests of individual staff members. In this way, each healthcare provider’s particular abilities and skills are fully utilized, enhancing operational efficiency. Non-medical personnel, such as environmental or administrative personnel, must be drawn on to lessen the clinical staff’s burden. Volunteers should be used, if available.”

The following is presented **ONLY** as an example of how awardees might wish to address this benchmark. HRSA encourages applicants to clearly articulate the staffing patterns that have been determined for the awardee jurisdiction and regions, to the extent possible, and provide justification for those numbers.

Concept of Operations for the Acute Care Center

The *Concept of Operations for the Acute Care Center* is the product of a multiagency working group, including representatives from the staffs of major academic medical centers and research, government, military, public health, and emergency management institutions and agencies.

This *Concept of Operations for the Acute Care Center* was written to assist planners, administrators, responders, medical professionals, public health, and emergency management personnel in better preparing for and providing mass casualty care. The content of this document will be of particular interest to anyone involved in civilian preparedness for terrorism. This concept of operations describes

the specific command organization, operational execution, and the logistical and staffing requirements associated with the ACC. Additionally, the document addresses the philosophy of care and operational considerations that must be considered when implementing the ACC strategy.

The ACC is envisioned to supplement the existing healthcare system in managing the overwhelming number of casualties that most likely would result from such an attack. The Acute Care Center (ACC) concept is based on extensive consultation and research. The process used to develop and validate the ACC concept involved extensive literature review, a series of working group sessions, and the application of several operational research techniques, including computer modeling and independent panel review.

Example:

Concept of Operations for the Acute Care Center Suggested minimal staffing per 12-hour shift for a 50-bed nursing subunit follows:

- (1) Physician
- (1) Physician's assistant (PA) or nurse practitioner (NP) (physician extenders)
- (6) RNs or a mix of RNs and licensed practical nurses (LPN)
- (4) Nursing assistants/nursing support technicians
- (2) Medical clerks (unit secretaries)
- (1) Respiratory therapist (RT)
- (1) Case manager
- (1) Social worker
- (1) Housekeepers
- (1) Patient transporters

The minimal number of staff providing direct patient care on the 50-bed nursing subunit per 12-hour shift is 12, which includes the physician, the physician extenders, nurses, and nursing assistants. (ACC CONOPS)

This effectively gives a healthcare provider to patient ratio of 1:4, which should be based directly again on the number of beds required in CBM # 2.1. A full example is noted below in the text.

Example: Staffing Ratio 24/7

(e.g., $168 \text{ hours}/40 = 4.2 \text{ FTEs}$, each position requires 4.2 FTEs for 24/7 operations)

Example Case: State A

(1:4): $2798 \text{ beds}/4 = 699.5 \text{ providers}$,

$(699.5 \text{ providers}) \times (4.2 \text{ FTEs}) = 2938 \text{ Healthcare providers}$

Awardee	Population	Surge beds	Health Care Personnel (1:4)	Health Care Personnel (1:6)
State A	5,595,211	2,798	2,938	1,958
State B	11,353,140	5,677	5,960	3,974
State C	20,851,820	10,426	10,947	7,298

Minimal Level of Readiness

Awardees will have a response system that allows the immediate deployment of additional patient care personnel in support of surge bed capacity.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. An executive summary of no more than 5 pages summarizing the current system/plan.
2. An inventory of all healthcare providers needed to staff the surge beds required in HRSA CBM 2.1 by profession/discipline and by awardee region (as identified in the FY 2003 funding application) accompanied by appropriate population demographic information for verification.

Sentinel Indicator #2-3

Is there a response system in place? Yes No (provide one answer)

Number of additional direct patient care personnel which the awardee has identified and has available for deployment.

Doctors _____

Nurses _____

Critical Benchmark #2-4: Surge Capacity: Advance Registration System

Develop a system that allows for the advance registration and credentialing of clinicians needed to augment a hospital or other medical facility to meet patient/victim care increased surge capacity needs.

Mass casualty incidents demand an effective healthcare surge capacity, which in turn, demands reliable means to achieve rapid increases in human resources, facilities, equipment and material.

Each healthcare entity must decide for itself whether to accord any particular healthcare worker privileges to work in facilities for which it has responsibility. One approach to enhancing the availability of health care personnel is to include provisions for accepting the credentials maintained by other accredited health care facilities during an emergency into facility Emergency Operation Plans and mutual aid agreements.

Emergency Systems for Advance Registration of Volunteer Health Care Personnel (ESAR-VHP) are an additional step to provide for coordinated emergency increases in staffing of physicians, nurses, pharmacists, behavioral health professionals, emergency medical technicians and other appropriate health care professionals

For such systems to be useful in sharing personnel across facilities and jurisdictions, HRSA recognizes that there needs to be some common definitions and standards used by all ESAR-VHP systems. In addition, some basic technical standards will assist in providing interoperability of such systems. Therefore, during the 2004 fiscal year, HRSA intends to work closely with select States that have already begun developing advance registration systems and with national professional organizations (e.g. State professional licensing boards, hospitals, hospital associations, and health care professional associations), to develop ESAR-VHP guidelines and standards for the HRSA's FY 2005 guidance.

If no formal ESAR-VHP system has been established in a state, awardees are encouraged to lay the groundwork for such a system during this fiscal year. Activities to lay this ground work can include the following:

1. Establish a formal working group to strengthen partnerships identify state issues and initiate planning of their ESAR-VHP with relevant colleagues (e.g., State professional licensing boards, hospitals and hospital associations, health care professional associations).
2. Identify existing relevant databases that may be needed to recruit potential volunteers and relevant databases from which critical information can be verified/maintained up to date (such as licensure status). The Medical Reserve Corps is one such example and it should be looked at for inclusion in the overall State system.
3. Identify existing databases of health care personnel interested in volunteering for emergency response.

Initial efforts should be directed toward identification of volunteer Physicians, Registered Nurses and Behavioral Health Professionals (including social workers, psychologists, psychiatrists, and therapists).

All work on advance registration systems shall be consistent with the National Response Plan and the National Incident Management System.

Please note that FY 2004 funds may be provided to hospitals to address policy, privileging, and implementation issues at the hospital level.

Minimal Level of Readiness

Awardees will have established a plan for their State-based systems that allow qualified competent and licensed health care professionals to work in an emergency situation throughout the awardee jurisdiction.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. Summary of efforts to establish, or plan for establishing a State ESAR-VHP system (e.g., workgroup and/or partnership development, identification of databases useful in further development of such a system).
2. Summary of existing or developing lists or databases of volunteer health care personnel.

Sentinel Indicator #2-4

Number of volunteer health professionals registered in the advance registration system:

- # Doctors (including physician extenders)
- # Nurses
- # Behavioral health professionals (including social workers, psychologists, psychiatrists and therapists)

Critical Benchmark #2-5: Surge Capacity: Pharmaceutical Caches

Establish regional plans that insure a sufficient supply of pharmaceuticals to provide prophylaxis for 3 days to hospital personnel (medical and ancillary staff), emergency first responders and their families as well as for the general community -- in the wake of a terrorist-induced outbreak of anthrax or other disease for which such countermeasures are appropriate.

The Strategic National Stockpile (SNS) currently contains enough antibiotics to provide a 60-day course for approximately 13 million people. Beginning in FY 2004 and continuing through FY 2006, the Department of Homeland Security (DHS) and the Department of Health and Human Services (DHHS) intend to enlarge the stockpile of antibiotics to 60 million 60-day courses.


Although the current stockpile can accommodate terrorist-induced infectious disease outbreaks in two or three major population areas simultaneously and the envisioned stockpile increases would more than quadruple this population coverage, a significant concern remains. In particular, in the wake of a bioterrorist attack anywhere within the U.S., many governors and mayors almost certainly will request immediate predeployment of SNS materiel to their region out of fear that their State or municipality might be the next target. SNS staff will be hard-pressed to accommodate more than a few such requests, even with the planned expansion. Thus, the existence of substantial local caches of antibiotics could do much to reassure community leaders and citizens that their first line of biodefense does not depend upon arrival of SNS materiel. Further, if terrorists were to attack multiple sites within the U.S. either simultaneously or in quick succession, local caches of antibiotics, used as part of a unified local/State/Federal plan, could make a significant difference in limiting the resultant mortality and morbidity.

Such local caches can be a highly cost-effective mechanism – especially if they take advantage of the existing infrastructure that is available through community-based pharmacies. For example, a 3-day supply of doxycycline for 1 million people would be 6 million tablets – i.e., 2 tablets per person per day.

At 5 cents per tablet, the cost of the doxycycline would be \$300,000 per million people or 30 cents per person.

Awardees must begin planning for regional caches that will eventually have sufficient antibiotics to provide coverage for the entire community. Plans should include the following issues:

1. The location and number of local caches and dispensing sites:
 - adequate staffing and flexible staffing patterns to dispense antibiotic prophylaxis over 72 hours to cover the entire community
 - how these sites will be integrated with local emergency operations plans and regional public health emergency plans.
2. Ensuring sufficient dispensing supplies (dispensing equipment, packaging, medication directions, and personal protective equipment against bacterial and viral infections for dispensing staff)
3. Establishing regional emergency after-hours call-down list of persons needed to mobilize, organize and respond to a public health emergency
4. Providing staffing to and participating in, activities of the local emergency operations center for the purpose of centralizing telephone, radio, and other electronic communications; compiling surveillance data; and maintaining a log of operations, decisions, resources, and order necessary to control the epidemic.

In addition, the organization, staffing, security, and logistics of the distribution and delivery of antibiotics, antiviral medications, vaccines, or other medications needed in an emergency epidemic must be planned for. 

All policy and operational issues that need to be discussed and worked through prior to an event are eligible for funding under this critical benchmark.

Further, the procedures developed under the CDC Cooperative Agreement for Smallpox Immunization Plans may prove applicable to predeployment of antibiotics as well.

Awardees may wish to survey each pharmacy licensed to operate within the awardee's jurisdiction to assess the par level of emergency medications.

No HRSA funds may be spent on purchasing of regional pharmaceutical caches for the general population without express approval from HRSA. HRSA requires that upon completion of comprehensive planning, the plans must be sent to the HRSA Project Officer.

A second type of regional pharmaceutical cache required under this critical benchmark are caches for hospital personnel (medical and ancillary), family members of those personnel and emergency first responders associated with these facilities. This is a continuation of work efforts from the FY 2003 HRSA Cooperative Agreement. Awardees are encouraged to coordinate their efforts with other agencies that fund local pharmaceutical caches – e.g., the Department of Veterans Affairs through its Veterans Hospitals and the DHS through its Metropolitan Medical Response Systems.

Protocols must be developed and completed that provide for distributing prophylactic medications and antidotes to hospital personnel (medical and ancillary), emergency first responders and their families, within 12 hours of an incident being identified.

Contingency plans for pharmaceuticals needed in chemical and radiological terrorism preparedness may be considered after biological terrorism preparedness is fully addressed as required under the authorizing legislation.

If possible, pharmacy-based surge cache(s) developed by the awardee should be within the stock rotational capacity of the participating pharmacies to prevent shelf-life expiration of the contents. The medications in the caches must be consistent with those in the Strategic National Stockpile (SNS).

HRSA funds may be expended without prior approval on pharmaceuticals caches for this second category.

Consistent with concerns that have been expressed about potential overuse of medical treatments for biological or chemical exposures, adult and pediatric treatment protocols must be in line with generally accepted clinical recommendations, such as those promulgated by CDC and appropriate professional organizations.

The awardee may enter into partnerships with hospitals, independent and chain pharmacies and pharmaceutical wholesalers that are able to stock more than the usual par level of required medications for daily needs. There may be agreements with drug wholesalers that offer a Vendor Managed Inventory (VMI) arrangement to ensure that medications do not exceed their expiration dates.

Consultation with CDC / SNS regarding participation in the ChemPack program is encouraged. This allows awardees to pre-deploy stocks of nerve agent antidotes in strategic locations for use in the event of a chemical attack. HRSA funds may be used to upgrade facilities to meet CDC prescribed requirements for storage of the ChemPack caches.

Awardees will focus on the following activities for the FY 2004 budget period. If the following activities have already been accomplished, submit the appropriate documentation to support the fulfillment of the activity and propose further activities to enhance current capabilities:

1. Develop plans for community wide antibiotic caches and prophylaxis protocols
2. Develop protocols whereby hospital personnel (medical and ancillary), emergency first responders, and their immediate family members are able to obtain at least a 72-hour supply of prophylactic medications within 12 hours of a disaster being declared.
3. Prepare and exercise plans for distribution of the hospital-related pharmaceutical caches.

Minimal Level of Readiness

75 percent of participating hospitals will have pharmaceutical caches sufficient to cover hospital personnel (medical and ancillary), emergency first responders and family members associated with their facilities for a 72 hour time period.

50 percent of awardees will have established community wide prophylaxis plans that are compatible with other existing state immunization or prophylaxis plans.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. An inventory of all participating (HRSA BT funded) hospital facilities that have provided assurances that they have sufficient pharmaceutical caches for their hospital personnel (medical and ancillary), emergency first responders and family members.
2. The total number of participating hospitals.

Sentinel Indicator #2-5

Number of hospital personnel (medical and ancillary), emergency first responders and their family members for whom a 3-day supply of antibiotics is available through state, local and regional caches.

Critical Benchmark #2-6: Surge Capacity: Personal Protective Equipment

Each awardee must ensure adequate personal protective equipment (PPE) per awardee defined region, to protect current and additional health care personnel, during a chemical, biological, radiological or nuclear incident. This benchmark is tied directly to number of health care personnel the awardee must provide (CBM # 2-3) to support surge capacity for beds (CBM # 2-1).

Critical Benchmark #2-7: Surge Capacity: Decontamination

Ensure that adequate portable or fixed decontamination systems exist for managing adult & pediatric patients as well as health care personnel, who have been exposed during a chemical, biological, radiological, nuclear or explosive incident in accordance with the numbers associated with CBM # 2-1 & # 2-3. All decontamination assets must be based on how many patients/providers can be decontaminated on an hourly basis. The awardee should plan to be able to decontaminate all patients and providers within 3 hours from the onset of the event.

This effectively gives a healthcare provider to patient ratio of 1:4, which should be based directly again on the number of beds required in CBM # 2-1. A full example is noted below in the text.

Example:

Awardee	Population	Surge beds	Providers (1:10)	PPE Sets:x8 changes per	Decontamination Patients/hr
State A	5,595,211	2,798	1,175	9,400	1,324
State B	11,353,140	5,677	2,384	19,073	2,687
State C	20,851,820	10,426	4,379	35,031	4,935

Example not actual data

It is strongly suggested that when deciding what level of PPE to provide, awardees address issues of handling a highly infectious respiratory disease or any other communicable disease prior to addressing the “all hazards” PPE. Contingency plans for chemical and radiological terrorism preparedness may be proposed after biological terrorism preparedness is fully addressed as required under the authorizing legislation.

It is important that equipment purchased under this priority area is interoperable with equipment purchased with funds from the DHS State Homeland Security Grant Program (SHSGP) for first responders.

Resources that address biological PPE standards as developed by CDC:

- “Interim Domestic Guidance on the Use of Respirators to Prevent Transmission of SARS” (<http://www.cdc.gov/ncidod/sars/pdf/respirators-sars.pdf>)
- <http://www.cdc.gov/ncidod/sars/updatedguidance.htm>
- <http://www.cdc.gov/od/ohs/manual/pprotect.htm>
- <http://www.cdc.gov/niosh/ncpc/59fr66.html>

The DHS standards for personal protective equipment for first responders are available through www.nfpa.org

- NFPA 1951, Standard on Protective Ensemble for USAR Operations
- NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services
- NFPA 1991, Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies
- NFPA 1994, Standard on Protective Ensembles for Chemical/Biological Terrorism Incidents
- NFPA 1999, Standard on Protective Clothing for Emergency Medical Operations

OSHA Standards and interpretations addressing medical personnel and contaminated patients;

- “Emergency Response Training Necessary for Hospital Physicians/Nurses That May Treat Contaminated Patients,” OSHA standard interpretation, 10 March 1999.
- “Emergency Response Training Requirements for Hospital Staff,” OSHA standard interpretation, 25 April 1997.
- “Hazardous Waste Operations and Emergency Response,” 29 CFR 1910.120.
- “Medical Personnel Exposed to Patients Contaminated with Hazardous Waste,” OSHA standard interpretation, 31 March 1992.
- “Training Requirements for Hospital Personnel Involved in an Emergency Response of a Hazardous Substance,” OSHA standard interpretation, 27 Oct. 1992.

Minimal Level of Readiness

1. Awardees will possess sufficient numbers of PPE to protect both the current and additional health care personnel expected to be deployed in support of a Bio-terrorism event.
2. Awardees will possess contingency plans to establish sufficient numbers of PPE to protect both the current and additional health care personnel expected to be deployed in support of a chemical and radiological event.
3. Awardees will possess sufficient numbers of fixed and/or portable decontamination facilities for managing adult and pediatric victims as well as health care personnel, who have been exposed during a chemical, radiological, nuclear or biological incident.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. An executive summary of no more than five pages summarizing the current system/plan and capacity with the awardee jurisdiction.
2. An inventory of PPE sets needed in support of a bio-related event, established within the awardee identified regions (as identified in the FY 2003 funding application) providing appropriate population demographic information for verification.
3. An inventory of decontamination equipment and hourly capacity established within the awardee identified regions (as identified in the FY 2003 funding application) providing appropriate population demographic information for verification.

Sentinel Indicators #2-6 and #2-7

1. Number of health care personnel that can be adequately supplied with PPE for bio-related events.
2. Number of ambulatory and non-ambulatory persons that can be decontaminated per hour, for a 6 hour period.

Critical Benchmark #2-8: Surge Capacity: Behavioral (Psychosocial) Health

Enhance the networking capacity and training of health care professionals to be able to recognize, treat and coordinate care related to the behavioral health consequences of bioterrorism or other public health emergencies.

Awardees are encouraged to develop behavioral health components of hospital preparedness plans that are integrated with other existing emergency behavioral health plans developed by the State behavioral health authority. These plans should include the following issues:

- behavioral health issues related to quarantine;
- behavioral health issues related to evacuation;
- addressing anxiety among patients and families;
- addressing need of patients with medically unexplained physical symptoms;
- family support in hospital settings;
- death notification;
- risk communication in coordination with public health authorities to educate the public on potential risks and whether they should report to hospitals.

Awardees are encouraged to work with existing Behavioral Health Preparedness networks, task forces and workgroups already underway through the state behavioral health authority. These groups can provide information that will increase basic competence in responding to the behavioral health needs of adults, pediatrics and health care personnel.

If these groups do not exist in an awardee jurisdiction a subcommittee of the Joint Advisory Committee could be developed to determine what services are already in place, where there are gaps and how to collaborate with other agencies that may in fact be working on these same issues.

Any education activities proposed under this benchmark will be in accordance with the standards outlined under CB #5.

Minimal Level of Readiness

Awardees will identify the minimum behavioral health training competencies for health care professionals responding to bioterrorism or other public health emergencies.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. An Executive Summary of no more than five pages that outlines statewide behavioral health resources, current gaps in behavioral health services, and anticipated needs.
2. A list detailing trainings on behavioral health issues that includes the target audience, the date of the training and the objectives of the training.

Sentinel Indicator #2-8

Number of health professionals trained in the recognition, treatment and referral of patients exhibiting behavioral health consequences related to bioterrorism and other public health emergencies.

Critical Benchmark #2-9: Surge Capacity: Trauma and Burn Care

Enhance statewide trauma and burn care capacity to be able to respond to a mass casualty incident due to terrorism. This plan should ensure the capability of providing trauma care to at least 50 severely injured adult and pediatric patients per million of population.

Injury due to explosive devices has been, to date, the most common outcome of terrorist attacks both globally and domestically, and is likely to continue to be so in the future. One of the best ways to prepare for this is to support organized systems of trauma care.

A trauma system can typically handle up to 10 major trauma cases per day per million of population. But this capacity would be severely strained in a mass casualty incident due to terrorism. Additionally, based on recent expert panel discussions with burn care clinicians, it is estimated that 25-30% of all trauma injuries are burn patients. That is, for every 200 trauma cases seen, approximately 50-60 reflect acute burn injuries.

There should be contingency plans for terrorism preparedness involving mass trauma or burn casualties, after biological terrorism preparedness is fully addressed.

Awardees should focus on the following activities for the FY 2004 budget period:

1. Document that the findings of the 2003 HRSA Trauma-EMS program's trauma system assessment (if conducted in the awardee jurisdiction) have been reviewed and incorporated, as appropriate, into preparedness planning efforts for mass explosive emergencies due to terrorism.
2. Develop plans within hospitals and at the regional level for how the awardee would be able to increase the trauma and burn care capacity. These plans should also include provisions for the triage of less critically ill patients and the intra or inter-regional diversion and transport of less critical surgical patients to other facilities. Transport across State lines may also be necessary in some jurisdictions. All plans should consider a timeframe of up to 12 hours for triage, transport and admission to a specialty bed. Resources may include, but are not limited to, metropolitan medical response systems, disaster medical assistance teams, and mobile surgical response teams.

Regional plans may propose upgrading equipment or facilities to accommodate trauma and burn care due to a terrorist incident, but cannot be used to support new construction.

Minimal Level of Readiness

Awardees will have the capability of providing trauma and burn care to at least 50 severely injured adult and pediatric patients per million of population due to a mass casualty incident due to terrorism.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. Documentation that the findings of the 2003 HRSA Trauma-EMS program's trauma system assessment (if conducted in the awardee jurisdiction) have been reviewed and incorporated into the state plan to enhance trauma and burn care capacity.
2. Any trauma and burn care plans that have been developed.

Sentinel Indicator #2-9

Number of patients for whom the awardee is capable of providing trauma and burn care.

Critical Benchmark #2-10: Surge Capacity: Communications and Information Technology

Establish a secure and redundant communications system that ensures connectivity during a terrorist incident or other public health emergency between health care facilities and state and local health departments, emergency medical services, emergency management agencies, public safety agencies, neighboring jurisdictions and federal public health officials.

Proposals under the HRSA cooperative agreement to enhance health care system communication capabilities must be clearly integrated with corresponding proposals that respond to the CDC guidance addressing this same issue.

Proposals for upgrading and improving information technology must be consistent with the approach and technical specifications contained in Appendix F to the FY 2004 CDC guidance on the Public Health Preparedness cooperative agreement

Equipment purchased under this priority area must demonstrate interoperability with equipment purchased with funds from the Department of Homeland Security (DHS) State Homeland Security Grant Program (SHSGP) for first responders.

Minimal Level of Readiness

Awardees will have a secure and redundant communications system that allows connectivity among all agencies and healthcare entities responding to a terrorist event or other public health emergency.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. Jurisdiction wide plans that document vertical and horizontal connectivity and interoperability of the current communications and IT systems among the entities listed in the benchmark.
2. A summary of all ongoing information technology activities in use across the state to include Internet connectivity, e-mail notifications of alerts and other critical communications.
3. Evidence of the establishment of back up systems for use in the event all the above mechanisms and systems fail.
4. A summary of all current communications capabilities in hospitals, clinics, EMS systems and poison control centers. This must include the ability of the statewide communication system to respond to overloading of standard telephone, cellular phone and radio communications during a terrorist incident.

Sentinel Indicator #2-10

1. Do hospitals have redundant communication systems with:
Public Health _____ Local EOC _____ EMS _____ Law Enforcement _____
Emergency Management _____
2. This communication system includes:
Phones ____ Dedicated phones ____ Fax ____ HAM radio ____ Email ____
800 MHz radios _____ Fiber optics ____ Microwave radio ____ Satellite phones _____
Health Alert Networks _____

PRIORITY AREA 3: EMERGENCY MEDICAL SERVICES

Critical Benchmark #3: Emergency Medical Services

Enhance the statewide mutual aid plan for upgrading and deploying EMS units in jurisdictions/regions they do not normally cover, in response to a mass casualty incident due to terrorism. This plan must ensure the capability of providing EMS triage and transportation for at least 500 adult and pediatric patients per million population.

Emergency medical services (EMS) systems are an important component of a comprehensive terrorism preparedness plan, particularly in a chemical agent release or mass trauma scenario.

To avoid duplication of effort and overlap, the development and implementation of this mobilization plan should take into consideration the emergency medical services activities the jurisdiction will be supporting through funds from the Department of Homeland Security. Planning may incorporate EMS

systems not traditionally included in other funding streams, such as non-fire-based and college campus emergency medical systems. Awardees should discuss how planning at both the level of their own jurisdiction and the larger region will engage rural volunteer EMS services in the response plan.

Additionally, awardees this year will also be required to incorporate planning with local transportation authorities. This additional planning should focus on preparedness plans to ensure access to public metropolitan transportation modes in the event of a large-scale disaster scenario.

For children, this plan should build upon projects funded through the HRSA/MCHB EMS for Children (EMSC) Program but must not supplant funding available under that program.

Areas of consideration in planning may include personnel, training, communications, equipment, and treatment protocols.

To the extent justified by dedicated time spent working on terrorism preparedness and response, partial salary and benefits of the awardees EMS Medical Director may be supported under this cooperative agreement.

HRSA funds in general should not be used for the purchase of ambulances or other vehicles.

Minimal Level of Readiness

Awardees will have an established mutual aid plan for upgrading and deploying EMS units in jurisdictions they do not normally cover to ensure the capability of providing EMS triage and transportation for at least 500 adult and pediatric patients per million population.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. A copy of the current mutual aid plan(s).
2. Documentation that this plan is coordinated with local EMS Mass Casualty Plans and ensures the capability of providing EMS triage and transportation for at least 500 adult and pediatric patients per million population.
3. Documentation that memorandums of agreements with local transportation authorities are in place.

Sentinel Indicator #3

1. Number of transport units (buses/vans/trailers/ambulances, etc.) available to respond to a mass casualty incident at any one time.
2. Number of patients awardee has the ability to provide triage and transportation to.

PRIORITY AREA 4: LINKAGES TO PUBLIC HEALTH DEPARTMENTS

Critical Benchmark #4-1: Hospital Laboratories

Implement a hospital laboratory program that is coordinated with currently funded CDC laboratory capacity efforts, and which provides rapid and effective hospital laboratory services in response to terrorism and other public health emergencies.

Enhanced laboratory capacity is needed throughout the U.S. to identify and report on biological and chemical agents used by terrorists. The intent of this benchmark is to look at hospital laboratories as they coordinate with those of public health departments, in order to ensure optimal capacity to respond to terrorism, infectious disease outbreaks, and other public health emergencies.

Hospital laboratories should have protocols for referral of clinical samples and associated information to Laboratory Response Network (LRN) nodes that have relevant analytical capabilities. Some hospitals may choose to develop capabilities to rule out bioterrorist pathogens of concern.

The plan should focus on Level A participation of hospital laboratories in the LRN. The plan must be coordinated with activities under CDC Focus Area C and associated Critical Benchmarks.

The applicant may use funds to recruit and train hospital laboratory personnel as part of the effort to achieve this benchmark. Frequently, local Laboratory Response Network labs are tasked by states to facilitate training of hospitals in the immediate area of the LRN lab. Hospital laboratories should be made aware of these resources and utilize them to the extent possible for training needs.

Awardees must establish procedures for coordinating with public health laboratories to ensure a seamless screening, testing and reporting hierarchy.

There should be a system for electronic reporting of laboratory results to hospitals and clinicians that ensures rapid access to critical diagnostic information.

Where deemed appropriate by awardees that share common borders, there may be joint efforts to fund and implement a multi-awardee plan for supporting regional hospital laboratories capable of assisting in a biological, chemical or radiological terrorism response.

Minimal Level of Readiness

1. Participating hospital labs will have protocols for rapid referral of clinical samples and associated information to appropriate labs operating in accordance with guidance in CDC Focus Area C and associated Critical Benchmarks.
2. Participating hospital lab personnel will demonstrate competency in determining what situations warrant the initiation of these protocols as well as competency in following the protocols.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. An inventory of laboratory training that has been conducted in all hospital-based laboratories that outlines: subject matter taught, target audience, the date of the training and the objectives of the training.
2. A flow chart showing how information is communicated between the state health lab, hospitals, the health department and other agencies.

Sentinel Indicator #4-1

Number of participating hospital labs that have personnel who are trained in the protocols for referral of clinical samples and associated information in accordance with CDC Focus Areas and Critical Benchmarks associated with laboratories.

Critical Benchmark #4-2: Surveillance

Enhance the capability of rural and urban hospitals, clinics, emergency medical services systems and poison control centers to report syndromic and diagnostic data that is suggestive of terrorism to their associated local and state health departments on a 24-hour-a-day, 7-day-a-week basis.

The purpose of this priority area is to expand both rural and urban surveillance efforts at the pre-hospital, hospital and outpatient levels, in coordination with what is being accomplished through the CDC public health emergency preparedness cooperative agreement. All efforts in this area must be implemented in coordination with CDC Focus Area B and associated Critical Benchmarks.

It is important for hospitals, laboratories, clinics, EMS systems and poison control centers to be able to participate with health departments in prompt and uniform reporting of all patients meeting the appropriate case definition for disease syndromes or toxidromes suggesting a terrorist incident.

To ensure accessibility and usefulness to all partners, systems should allow for electronic communication between rural and urban hospitals, clinics, emergency medical services, poison control centers and public health agencies at all levels.

A flow chart should be created showing how surveillance information from all participating rural and urban hospitals, clinics, emergency medical services systems and poison control centers is communicated to the State Health Department and what happens to the information from that stage onward. Indicate the available means of communication (fax, e-mail, telephone etc.).

Minimal Level of Readiness

Awardees will have an established surveillance system that allows rural and urban hospitals, emergency medical care services systems and poison control centers to report data that is suggestive of terrorism to their local and state health departments on a 24-hour-a-day, 7-day-a-week basis.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. Documentation that all participating hospitals have the ability to report to the appropriate local or state health department diagnostic data that is suggestive of bioterrorism.
2. A regional and statewide inventory of the number of entities (e.g. hospitals, clinics, emergency medical services systems and poison control centers) in the awardee's jurisdiction that are connected to the state health department through an electronic surveillance system.

Sentinel Indicator #4-2

1. Number of each type of entity (e.g. hospitals, clinics, laboratories, emergency medical services systems and poison control centers) that is connected to the state and/or local health department.
2. Number of each of these entities that have the ability to report 24 hours/day, 365 days per year.

PRIORITY AREA 5: EDUCATION AND PREPAREDNESS TRAINING

Critical Benchmark #5: Education and Preparedness Training

Awardees will utilize competency based education and training programs for adult and pediatric pre-hospital, hospital, and outpatient health care personnel responding to a terrorist incident.

As awardees create plans to respond to terrorism or other public health emergencies, ensuring the availability of a competent health care workforce is a critical element. The ability to meet the population's needs for acute care during a public health emergency is dependent upon the rapid and coordinated efforts of capable providers and local and state public health response systems. This crucial component of the emergency response network helps to mitigate mortality and morbidity and preserves public order while using resources effectively and efficiently.

Competency based education and training are a means by which the health care workforce can both acquire the knowledge, skills and abilities required in a response and demonstrate the interaction of these elements in a given context, either in drills, exercises or training evaluations. Competency-based education focuses on the application of knowledge into observable outcomes or behaviors and is characterized by greater workplace relevance.

Awardees should first and foremost, through their education and evaluation systems, ensure that the health care workforce is able to:

1. Locate and use the section of the hospital emergency response plan that applies to their position;
2. Describe their emergency response role and be able to demonstrate it during drills or actual emergencies;

3. Demonstrate the use of any equipment (such as personal protective equipment or special communication equipment) required by each emergency response role;
4. Describe their responsibility for communicating with or referring requests for information from other employees, patients and families, media, general public, or their own families and demonstrate these responsibilities during drills or actual emergencies;
5. Demonstrate the ability to seek assistance through the chain of command during emergency situations or drills;
6. Demonstrate the ability to solve problems that arise carrying out their role during emergency situations or drills.

Profession-specific competencies have been created and should be addressed in cooperation/ coordination with the CDC cooperative agreement and HRSA's Bioterrorism Training and Curriculum Development Programs where available.

If hospital and health system staff has demonstrated the aforementioned abilities, hospitals can proceed to train their staff in subject matters directly related to mass casualty incidents caused by radiological, explosive, chemical or biological agents. These might include:

1. Illness and disease management for healthcare professionals
2. Event Recognition
3. Triage
4. Transportation
5. Decontamination
6. Psychological Effect
7. Fatality Management

Training should not only target those in the medical field, but also public health professionals, local and state employees, hospital administration, emergency medical services personnel, etc.

Furthermore, all education and training activities chosen for funding under this benchmark should be directly put to practice in the state/jurisdiction exercises and drills (see CBM 6). Education and training associated with this benchmark should clearly demonstrate linkages with exercises/drills and with the overall state/jurisdiction preparedness plan.

These activities should be complementary to those funded under the CDC cooperative agreement. Funds may be used to enhance the ability of poison control centers to respond immediately to requests for information from health care professionals and the general public following a terrorist incident.

Please note that FY 2004 funds may be used to offset the cost of hospital personnel in order for them to attend training and education sessions. HRSA fully expects that awardees will work closely with their sub-recipients in determining cost-sharing arrangements that will facilitate the maximum number of personnel being able to participate in drills and exercises. HRSA strongly discourages the use of these

cooperative agreement funds to pay for pool staff to backfill the positions of existing staff during these events.

Awardees must provide a description of the cost-sharing principles that have been set up to assure the maximum number of personnel are afforded these trainings as well as to ensure that cooperative agreement funds are not the sole source of funding enabling this training.

Minimal Level of Readiness

Education and training programs for adult and pediatric pre-hospital, hospital, and outpatient health care personnel are competency based.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. A list of trainings provided correlated directly to mass casualty incidents, detailing the subject matter, the targeted audience, the date of the training and the objectives of the training.
2. A description of how the education and training activities discussed in this benchmark will be linked with the exercises/drills and with the overall state/jurisdiction preparedness plan.

Sentinel Indicator #5

Number of health care personnel trained through competency-based programs annually.

PRIORITY AREA 6: TERRORISM PREPAREDNESS EXERCISES

Critical Benchmark #6: Terrorism Preparedness Exercises

As part of the state or jurisdiction's bioterrorism hospital preparedness plan, exercises/drills will be conducted during FY 2004. These exercises/drills should encompass at least one biological agent; the inclusion of scenarios involving radiological and chemical agents as well as explosives may also be included as part of the exercises/drills.

Exercises/drills should cover a large-scale scenario affecting adults and children. Hospitals, clinics, community health centers, poison control centers, emergency medical services, state and hospital laboratories, and local/county public health departments must be involved and play a crucial role in the exercise. Rural and urban areas should be included in the exercises/drills; ideally an entire jurisdiction should participate.

Coordination among Federal, state and local/county agencies is vital when planning and conducting exercises and drills. Awardees are encouraged to plan and when possible explore joint funding of exercises and drills with partners such as grantees of the Department of Homeland Security or other entities at the state and/or Federal level and other agencies as noted above.

Exercises/drills must be of sufficient intensity to challenge management and response operations. The intensity of the exercise should test the plan for hospitals surge capacity (staff, beds, equipment) as well as alternative sites for patient care. The needs of special populations listed in the application must be addressed in the exercise. The exercises and drills should have components built into them to test risk communications plans.

Behavioral health is a crucial element in any bioterrorism exercise/drill. Acute psychosocial interventions and psycho-educational briefings should be skillfully incorporated in the exercise scenario and behavioral health professionals for adults and children should be included in those personnel participating in the exercise.

Awardees may elect to substitute conducting exercises/drills if a real extended disaster strikes the area. Using the experience gained during a disaster must be approved by HRSA and the same reporting requirements will apply. Characteristics of an extended disaster include:

1. prolonged duration;
2. extensive in geographical expanse;
3. impact upon major percentage of the community's population, and
4. involve multiple response organizations.

Please note that FY 2004 funds may be used to offset the cost of having hospital personnel participate in drills and exercises. HRSA fully expects that awardees will work closely with their sub-recipients in determining cost-sharing arrangements that will facilitate the maximum number of personnel being able to participate in drills and exercises. HRSA strongly discourages the use of these cooperative agreement funds to pay for pool staff to backfill the positions of staff who will be participating in these events.

Awardees must provide a description of the cost-sharing principles that have been established to ensure the number maximum personnel are afforded the opportunity to participate in drills as well as to ensure that cooperative-agreement funds are not the sole source of funding to enable that participation.

Minimal Level of Readiness

Awardees will conduct terrorism preparedness exercises/drills that:

- Contain elements addressing the needs of special populations;
- Emphasize a regional approach; and
- Are coordinated with other state, local and Federal drills and exercises to maximize resources.

In order to demonstrate compliance with the minimal level of readiness, awardees will submit the following documentation to HRSA by the end of the FY 2004 budget period:

1. A list of exercises/drills conducted throughout the year with a brief one- or two-sentence description.
2. After-action reports that detail:

- The date, location, personnel, participating agencies and funding source for the exercise (state, local, federal or a combination of all three)
- How the needs of special populations were incorporated into the drills and will be incorporated into future drills and exercises
- That all health care workforce practiced and understood their roles, and
- Lessons learned and how those will be applied to future exercises and drills and incorporated into response plan updates.

Sentinel Indicator #6

1. Number of statewide or regional drills carried out during the FY 2003 grant year ____
2. Agents involved in drill:
Chemical ____ Biological ____ Radiological ____ Nuclear ____ Explosive ____
3. Drills included the following:
EMS ____ Hospitals ____ Police ____ Labs ____ Public health entities ____
Indian Nations ____ Department of Homeland Security ____
Federal Bureau of Investigation ____ Federal Emergency Management Agency ____
Centers for Disease Control and Prevention ____

DHHS CROSS-CUTTING BENCHMARKS AND ACTIVITIES

Answers to all Cross-cutting Benchmarks and Activities will be provided through the secured CDC Web Portal as done in FY 2003. Since the Cross-cutting issues are identical for both the HRSA and CDC guidance answers entered through the web portal will be considered as responding to both the HRSA and CDC requirement.

Public health emergency preparedness requires that state and local public health departments, hospitals, and other healthcare entities be able to mount a collective response featuring seamless interaction of their event-specific capabilities. To this end, activities by both the public health community and the healthcare community must be well integrated, and integration must be both vertical (i.e., between state and local activities) and horizontal (i.e., between public health and hospital/healthcare system activities).

In addition, public health emergency preparedness activities should be coordinated closely with those of homeland security, public safety, and emergency management agencies – especially with respect to activities funded by the U.S. Department of Homeland Security and/or other agencies of the federal government. States should provide robust support for efforts by counties and municipalities to enhance their readiness for public health emergencies, including their capability for rapid accommodation of state and federal assets such as the Strategic National Stockpile and response teams dispatched by the National Disaster Medical System.

The estimated costs for the activities described below are eligible for inclusion, with an appropriate distribution, in both the CDC and HRSA cooperative agreements.

A. CROSS-CUTTING CRITICAL BENCHMARKS

In association with the CDC and HRSA FY03 cooperative agreements, the HHS Office of the Assistant Secretary for Public Health Emergency Preparedness (OASPHEP) prescribed five Cross-Cutting Critical Benchmarks as follows:

- Cross-Cutting Critical Benchmark #1: Incident Management
- Cross-Cutting Critical Benchmark #2: Joint Advisory Committee for CDC and HRSA Cooperative Agreements
- Cross-Cutting Critical Benchmark #3: Laboratory Connectivity
- Cross-Cutting Critical Benchmark #4: Laboratory Data Standard
- Cross-Cutting Critical Benchmark #5: Jointly Funded Health Department/Hospital Activities
- Cross-Cutting Critical Benchmark #6: Preparedness for Pandemic Influenza

See the FY03 guidance for a detailed description of the first 5 Cross-Cutting Critical Benchmarks.

OASPHEP will track awardees' progress toward these five Cross-Cutting Critical Benchmarks by reviewing the FY03 progress reports and the FY04 workplans. OASPHEP expects that awardees will have achieved benchmarks 1, 2, 3, and 5 on or before the end of the FY03 budget period (ending August 31, 2004) and thus is not repeating these benchmarks in association with the FY04 guidance. However, awardees that have not achieved these four benchmarks by the end of the FY03 budget period may be subject to funding restrictions on their FY04 award.

While expecting significant progress toward Cross-Cutting Benchmark #4 during the FY03 budget period, OASPHEP recognizes that implementation of the LOINC data standard may be limited to those occasions when the awardee or subrecipients is upgrading or replacing a laboratory information system. Therefore, OASPHEP is repeating Cross-Cutting Benchmark #4 in association with the CDC and HRSA FY04 guidances with a view to fostering continuous incremental introductions of the LOINC data standards as opportunities warrant.

Further, OASPHEP is introducing a new Cross-Cutting Benchmark dealing with preparedness for and response to pandemic influenza. The benchmark emphasizes preparedness for the early stages of such a pandemic, when a safe and efficacious vaccine either will be non-existent or in severely limited supply.

Cross-Cutting Critical Benchmark #4: Laboratory Data Standard

Adopt the Logical Observation Identifiers Names and Codes (LOINC), where applicable, as the standard codes for electronic exchange of laboratory results and associated clinical observations between and among clinical laboratories of public health departments, hospitals, and other entities, including academic health centers that have a role in responding to bioterrorism and other public health emergencies. Adoption of and adherence to data standards can do much toward ensuring effective and efficient response to bioterrorism and other public health emergencies. On March 21, 2003, the Secretaries of Health and Human Services, Defense, and Veterans Affairs announced their joint adoption of the first set of uniform standards for electronic interchange of clinical health information (<http://www.hhs.gov/news/press/2003pres/20030321a.html>). Extension to the Laboratory Response Network and related laboratories is an important next step. Additional information about LOINC and its relationship to other data standards can be found at <http://www.loinc.org/>. During the course of the upcoming budget period, CDC will provide technical assistance regarding implementation of LOINC and, along with the Office of the Secretary, HHS, will participate in collaborative efforts to refine and extend the codes as necessary to meet the needs of public health emergency preparedness.

RECIPIENT ACTIVITIES:

Describe your status in adopting and implementing LOINC and plans for refinement or extension of LOINC. Include in the description the number and types of laboratories that have adopted LOINC, as well as those that are critical to your public health emergency preparedness but have not adopted LOINC. Document any concerns that laboratories have about LOINC and the steps you have taken to collaboratively resolve those concerns. Finally, describe your plans for ensuring jurisdiction-wide adoption of LOINC.

Cross-Cutting Critical Benchmark #6: Preparedness for Pandemic Influenza

An influenza pandemic has a greater potential to cause rapid increases in death and illness than virtually any other natural health threat. Planning and preparedness during the inter-pandemic period are the keys to an effective response.

Three pandemics occurred during the 20th century, the most severe of which, in 1918, caused over 500,000 U.S. deaths and more than 20 million deaths worldwide. Recent outbreaks of human disease caused by avian influenza strains in Asia and Europe highlight the potential of new strains to be introduced into the population.

In the face of an influenza pandemic, reducing the burden of illness, maintaining social order, and blunting the adverse economic impacts constitute a public health imperative. Early in the pandemic, especially when vaccine either is non-existent or in severely short supply, implementation of stringent infection control measures may have a significant effect in slowing the progression of – if not quenching – the epidemic. Actions that warrant serious consideration are travel advisories and precautions, screening persons arriving from affected areas, closing schools, restricting public gatherings, and quarantine of exposed or symptomatic persons. Moreover, such traditional infection control measures could be enhanced by targeted therapeutic and prophylactic use of antiviral drugs if sufficient supplies of these countermeasures are available through normal commercial channels, local pharmaceutical caches, or the Strategic National Stockpile.

Planning by state and local health departments and by the health care system is needed to assure effective implementation of response activities and delivery of quality medical care in the context of increased demand for services. Coordination in planning and consistency in implementation with other emergency response plans, such as those for bioterrorist threats and SARS, can further improve efficiency and effectiveness.

An influenza pandemic will place a substantial burden on inpatient and outpatient health care services. Illness and absenteeism among health care workers in the context of increased demand for services will further strain the ability to provide quality care. In addition to a limited number of hospital beds and staff shortages, equipment such as respirators and supplies such as masks also may be in short supply overall or at individual facilities. The disruptions in the health care system that result from a pandemic may also have an impact on blood donation and supply. Planning by local health departments and the health care system is important to address these potential shortages.

Strategies to increase hospital bed availability include deferring elective procedures, more stringent triage for admission, and earlier discharge with follow-up by home health care personnel. Local coordination can help direct patients to hospitals with available beds and distribute resources to sites where they are needed. Health care facilities also can be established in non-traditional sites such as schools, community centers, etc. as needed and based on availability of staff. Specific challenges in these settings such as infection control must be addressed. Most ill persons will not require hospital care but may need other

support services. These include home health care, delivery of prescription drugs, and meals. Local planning is needed to address the delivery of these and other essential community functions such as police, fire, and utility services.

RECIPIENT ACTIVITIES:

FY04 Workplan: In no more than 5 pages, describe the jurisdiction's current plan for responding to pandemic influenza and discuss the envisioned approach to achieving this benchmark

Interim Progress Report: Provide a draft of the jurisdiction's pandemic influenza response plan in association with the interim progress reports for CDC and HRSA FY04 cooperative agreements.

End of the FY04 Budget Period: Provide a copy of the complete pandemic influenza plan for the jurisdiction to OASPEP in accord with instructions that HHS will provide during the summer of 2005.

B. OTHER CROSS-CUTTING ACTIVITIES

Responses to the activities in this section should specifically and clearly illustrate collaboration and coordination between public health departments, hospitals and other supporting healthcare entities. For each of the Cross-Cutting Activities identified below, please provide responses to the following three questions.

1. What activities are you planning for the next budget period that will ensure (a) continuing improvements in each of the Cross-Cutting activities identified below and (b) coordination and integration of efforts between the CDC and HRSA Cooperative Agreements?
2. What steps are you taking to help ensure sustainability of infrastructure, staff, and relationships (especially between the public health and hospital/health care communities) developed as a result of these cooperative agreements?
3. What collaborative efforts are being undertaken with local health departments and hospitals to develop an integrated regional approach?

Surveillance. Integration of disease surveillance systems at the state and local levels, including hospital-based surveillance systems so that relevant data on disease reporting is rapidly captured and analyzed. Systems should allow for electronic communication between hospitals and public health departments at all levels.

Coordination with Indian Tribes. Indian tribal government participation in state and local preparedness planning and implementation.

Populations with Special Needs. Activities that will be implemented to meet the specific needs of special populations that include, but are not limited to, people with disabilities, people with serious mental illness, minority groups, the non-English speaking, children, and the elderly. These activities must take into consideration all operational and infrastructure issues as well as public information/risk

communication strategies. Such activities must be integrated between the public health and the hospital communities.

Planning for Psychosocial Consequences of Bioterrorism and Other Public Health Emergencies. Efforts the state health department is making to work with state and local mental health agencies, hospitals, mental health providers, and public and private emergency response and social services entities in planning to meet the psychosocial needs of victims, those at risk, their families, psychological casualties both with and without medical illness, and emergency responders (including healthcare personnel, public health professionals, EMTs etc.).

Education and Training. Activities that the health department will undertake to train or ensure training of its staff and those in local health departments, hospitals, major community health care institutions, emergency response agencies, public safety agencies, etc. to respond in a coordinated (non-overlapping) manner in the event of a bioterrorist attack or other public health emergency to minimize duplication and fill gaps.

Involvement of Academic Health Centers. Activities that the state health department will be undertaking to involve academic health centers, if available in their regions, in their preparedness efforts.

Interoperability of IT Systems. Measures that the state will be taking to ensure the connectivity and interoperability, both vertically and horizontally, of its various IT systems with those of local health departments, hospitals, emergency management agencies, public safety agencies, neighboring states, federal public health officials and others.

Interstate Collaboration. Activities by states and local health departments in jurisdictions sharing a border with one or more states to foster interstate collaboration and coordination, especially in high population density areas along the state border(s). Special attention should be paid to any collaborative efforts undertaken by local health departments with hospitals in their communities to develop an integrated regional approach to a mass casualty event.

International Border States. Efforts by state and local health departments in jurisdictions sharing an international border with Mexico or Canada to foster cross-border collaboration and coordination. States may use funds to conduct necessary activities in support of bi-national planning, coordination, communications, program development, and exercises with Mexico or Canada if such actions directly contribute to health security in the United States.

ATTACHMENT A – HRSA BIOTERRORISM HOSPITAL PREPAREDNESS PROGRAM BUDGET TEMPLATE

HRSA National Bioterrorism Hospital Preparedness Program FY 2004 Budget Directions

The FY 2004 cooperative agreements will perpetuate successful FY 2003 bioterrorism preparedness project activities. The FY 2004 cooperative agreements will also include planning and implementation of modified and/or expanded activities designed to prepare the regional health care systems for incidents of terrorism or other public health emergencies. Awardees will continue to involve their local partners in this effort. These partners must include, but are not limited to, pediatric and adult hospital associations, emergency medical systems, emergency management agencies, rural health offices, primary care associations, health care professional organizations and Federal health care facilities (including those of the Indian Health Service, Veteran's Administration and Department of Defense).

Awardees will be given the flexibility to prioritize funding for specific activities based upon their current activities, prior needs assessment, and ability to achieve the Minimal Level of Readiness for each Critical Benchmark, within the overall context of national terrorism preparedness objectives. Awardee funding should be available only as resources allow and according to awardee needs determinations.

Awardee health departments will be required to allocate eighty-percent of these funds to hospitals, emergency medical systems, poison control centers, health centers, rural health clinics, federally qualified health centers, tribally-owned health care facilities serving American Indians and Alaska Natives, and other outpatient facilities that serve as vital points of entry into the health care system.

While the intent of the cooperative agreement is to fund health care entities directly for their preparedness activities, or to implement activities that have a direct benefit to these entities, associations of hospitals and other health care entities may serve as sub-awardees to facilitate the movement of funds from the state to the sub-awardee level in a more expedient manner.

Indian Health Service facilities and Veterans Association healthcare facilities may also be eligible for State funding under this program. To the extent that such facilities apply for awardee funding and provide the requisite documentation, the awardees may provide funding based on appropriate State law and procedures.

Given the responsibilities of Federal, State, and local governments to protect the public in the event of terrorism, funds from this cooperative agreement must be used to supplement and not supplant the non-Federal funds that would otherwise be made available for this activity.

No matching costs or cost sharing are required.

Awards are intended to support the development and implementation of DHHS-approved work plans, and contracts to health care entities to upgrade their ability to respond to terrorist incidents.

The HRSA will not accept budgets that do not use the SF424 budget pages as well as the template following these instructions. Include a narrative justification for each line item. The budget must be submitted to HRSA using the following instructions. The template can be found in the attached Excel spreadsheet. Note the following instructions correspond to the layout and lettering system on the budget sheet:

A. Awardee Operating Costs

(Consists of Section A - Administration; Section B - Fringe Benefits; Section C - Travel; Section D - Supplies)

(For this cooperative agreement, awardee operating costs may be budgeted at no more than 10% of direct costs.)

Operating costs that can be specifically allocated to this program must be justified and reasonable. Since this program exists primarily to support health care entities directly in preparing for terrorism, costs associated with contracts to associations and other entities that provide support to the awardee are treated as health department costs, not as direct support of health care entities. Cost items may include:

- Bioterrorism Preparedness Coordinator: up to 1 full-time equivalent (FTE)
- Medical Director: up to 1 (FTE)
- Professional and administrative staff
- Travel expenses*
- Meeting expenses*
- Administrative/programmatic equipment and supplies
- Fringe benefits
- Phone and electronic mail and
- Audit Costs

*Awardees are instructed to budget for a minimum of 2 (possibly up to 4) round trips to Washington, DC for the Annual Awardee Meeting to be held in November 2004. This meeting is planned by the awardees, for the awardees, in cooperation with HRSA staff and is intended to serve as a National forum for networking, showcasing of best practices and providing input and feedback to the HRSA staff on future directions and considerations of the program. As well this meeting serves as a time for states to receive intensive technical assistance from program staff, if needed.

E. Awardee-wide Planning Costs

(Up to 10% of direct costs may be allocated to awardee-wide planning efforts done by the health department and its contractors.)

Costs attributable to planning and coordination for the State health department and its contractors must be justified and reasonable. Examples of these costs include conducting awardee-wide needs assessments and developing mutual aid agreements. Operating costs for contractors related to administration and personnel for awardee-wide planning, will be treated as health department costs, not as direct support of health care entities or regional planning costs.

F. Implementation Costs for HRSA Priority Areas and Critical Benchmarks

These are expenses provided directly to hospitals, outpatient facilities, emergency medical services and poison control centers for developing and implementing the priority area plans. Planning and implementation expenses borne by health departments and their contractors for direct support of regional systems of care may also be treated as implementation costs.

Examples of implementation expenses include purchase of medications, personal protective equipment, mobile decontamination facilities or communications equipment either directly by a health care entity or on behalf of it by the awardee or its contractors. Expenses of conducting a disaster drill may also be treated as implementation costs.

Provide an itemized budget and justification for the proposed distribution of funds to hospitals, outpatient facilities, EMS systems and poison control centers, or to planning and implementation costs borne by health departments and their contractors in direct support of priority areas as described above.

G. Direct Costs

This is the total of all line items in categories A- F.

H. Indirect Costs

(For this cooperative agreement, indirect costs are budgeted at the state's pre-negotiated rate, but at no more than 10% of the total award.)

These are costs that are incurred for common or joint objectives within an organization's budget, and therefore cannot be identified readily and specifically with a particular program. For example, the costs of operating and maintaining facilities, depreciation, and administrative salaries are generally treated as indirect costs.

I. Total Cost

This amount must add up to the total HRSA award for FY 2004.

ATTACHMENT B – GLOSSARY OF TERMS COMMONLY USED IN BIOTERRORISM PREPAREDNESS

Glossary

Advanced Life Support Ambulance (ALS) – an ambulance service capable of delivering advanced skills performed by an EMS practitioner, e.g. intravenous fluids and drug administration.

All-Hazard – covering all possible hazards whether natural, accidental negligent or intentional.

All-Hazards Preparedness – preparedness for domestic terrorist attacks, major disasters and other emergencies.

Anthrax – a non-contagious potentially fatal disease caused by breathing, eating, or skin contact with spores of the skin bacteria known as *Bacillus anthracis*.

Basic Life Support Ambulance (BLS) - an ambulance service capable of delivering basic emergency interventions performed by EMS practitioners trained and credentialed to do so, e.g., splinting, bandaging, oxygen administration.

Biological Agent – living organisms, or the materials derived from them that cause disease in, or harm, humans, animals, plants, or cause deterioration of material. Biological agents may be found as liquid droplets, aerosols, or dry powders. A biological agent can be adapted and used as a terrorist weapon, such as anthrax, tularemia, cholera, encephalitis, plague, and botulism. There are three different types of biological agents: bacteria, viruses, and toxins.

Biological Attack – the deliberate release of germs or other biological substances that can cause sickness.

Biological Incident – a natural, accidental, negligent or deliberate exposure involving biological agents.

Bio-Safety Level – a system for classifying laboratory safety practices, in four levels, by degree of protection provided to personnel, the environment, and the community for laboratories dealing with infectious microorganisms. Laboratories dealing with microorganisms not known to consistently cause disease in healthy humans require no special practices and operate at Bio-Safety Level 1. Laboratories dealing with the most dangerous and exotic microorganisms that pose high risk of life threatening disease require the most stringent practices to protect against contact or release of the microorganisms and operate at Bio-Safety Level 4. (Contrast with Laboratory Levels)

Bioterrorism – the use of a biological agent in a terrorist incident; the intentional use of microorganism or toxins derived from living organisms to produce death or disease in humans, animals, or plants.

BT – Bioterrorism

Carrier – a person or animal that harbors a specific infectious agent without discernible clinical disease and serves as a potential source of infection. The carrier state may be of short or long duration (temporary or transient carrier, or chronic carrier).

Category-A Agents – the biological terrorism agents having the greatest potential for adverse public health impact with mass casualties. The Category “A” diseases are: smallpox; anthrax; plague; botulism; tularemia; viral hemorrhagic fevers (e.g. Ebola and Lassa viruses).

Category-B Agents – could be used to contaminate food or water sources. Agents are more readily available, may not necessarily cause mass casualties, and their use may often be found more often in the setting of biological crime or extortion than terrorism.

Category-C Agents – emerging infectious diseases or agents with characteristics that could be exploited for deliberate dissemination.

CBRNE – types of Weapons of Mass Destruction: Chemical, Biological, Radiological, Nuclear, and Explosive.

CDC – Centers for Disease Control and Prevention (US HHS).

CDC Type C Facility - an isolation facility that meets the following requirements: a structure with non-shared air conditioning, heating, and ventilating systems that exhausts 100% of air to the outside through HEPA filter or is located at least 100 yards from any other occupied building or area; adequate water, electricity, heating, cooling, and closed-window ventilation to maintain activities of daily living and tertiary medical care of residents; a communication system that allows for dependable communication within and outside of the facility (e.g. telephone or intercom system); ability to provide the following medical care within the facility: supportive care with iv fluids, antibiotics, etc. skin care: oxygen monitoring (pulse ox) and oxygen (in-line or portable); medical vital signs monitoring; cardiac and respiratory resuscitation; ventilatory support; suctioning equipment; basic laboratory evaluations (blood chemistries, CBC); radiology (portable chest x-ray) staffing resources (to be determined by severity of illness) A Type C facility is appropriate for confirmed, probable, and suspected smallpox cases.

CDC Type R Facility - (R = residential) may be the person’s own home. A Type R facility is appropriate for asymptomatic contacts (not infectious).

CDC Type X Facility – meets the same isolation and general supply requirements as a Type C Facility. However, Type X Facilities need to supply only basic medical care functions such as monitoring vital signs.

CERT – Community Emergency Response Team.

Chemical Agent – a chemical substance that produces incapacitation, serious injury or death.

Chemical Attack – the deliberate release of a toxic gas, liquid, or solid that can poison people and the environment.

Chemical Incident – an accidental or deliberate exposure involving chemical agents.

Chemical Terrorism – the use of a chemical agent in a terrorist incident. to intentionally inflict harm upon others.

Communicable Disease – an illness due to a specific infectious agent or to toxic products that arises through transmission of that agent or its products from an infected person or animal to a susceptible host. (Contrast with infectious disease).

Communications - the system by which the message is communicated.

Contingency Plan – targets a specific issue or event that arises during the course of disaster operations and presents alternative actions to respond to the situation.

Counterterrorism – the full range of activities directed against terrorism, including preventive, deterrent, response and crisis management efforts.

Decontamination – the process of making people, objects, or areas safe by absorbing, destroying, neutralizing, making harmless, or removing chemical, biological, or radiological material.

DHS - Department of Homeland Security (US).

Dirty Bomb – the use of common explosives to spread radioactive materials over a targeted area. Also known as a radiation attack, a “dirty bomb” is not a nuclear blast, but rather an explosion with localized radioactive contamination.

Disaster, major (federal) – “Major disaster” means any natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under this [Stafford] Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby. (From: Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by Public Law 106-390, October 30, 2000, Sec. 102).

DMAT - Disaster Medical Assistance Team.

Drills – small-scale, internally conducted, activities aimed at providing a more “hands-on” teaching environment to familiarize staff with actual procedures necessary for emergency operations. They may be stopped and restarted in order to clarify a point, provide instruction, allow for observations from the evaluator and evaluatee, or to permit the evaluatee a second chance to perform a procedure or activity.

EMAC – Emergency Management Assistance Compact.

Emergency (federal) - any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States (From: Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by Public Law 106-390, October 30, 2000, Sec. 102).

Emergency Management – a systematic program of activities that governments and their partners undertake before, during, and after a disaster to save lives, prevent injury, and to protect property and the natural environment.

EMS - Emergency Medical Services.

EMT - Emergency Medical Technician.

EPA - Environmental Protection Agency (US).

Epidemic – the occurrence in a community or region of cases of an illness (or outbreak) with a frequency clearly in excess of normal expectancy.

Exercises – large-scale enactments of emergency situations to test the response system and plan. They are usually developed and evaluated by an external agency. An exercise is a test of knowledge and is not to be interrupted except for safety concerns or for a true emergency situation.

FDA – United States Food and Drug Administration (US HHS).

Febrile – denoting or relating to fever.

FEMA - Federal Emergency Management Agency (US).

First Responder – those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers.

FRP - Federal Response Plan (US).

Hazard – a source of potential harm from past, current, or future exposures.

Hazardous Materials (HazMat) – any material that is explosive, flammable, poisonous, corrosive, reactive, or radioactive, or any combinations thereof, and requires special care in handling because of the hazards it poses to public health, safety, and/or the environment; any hazardous substance under the Clean Water Act, or any element, compound, mixture, solution, or substance designated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any hazardous waste under the Resource Conservation and Recovery Act (RCRA); any toxic pollutant listed under pretreatment provisions of the Clean Water Act; any hazardous pollutant under Section 112 of the Clean Air Act; or any imminent hazardous chemical substance for which the administrator has taken action under the Toxic Substances Control Act (TSCA) Section 7. (Section 101[14]) (CERCLA) Hazardous Substance Release and Health Effects Database (HazDat) – the scientific and administrative database system developed by the Agency for Toxic Substances and Hazardous Waste – potentially harmful substances that have been released or discarded into the environment.

HEICS - Hospital Emergency Incident Command System is an emergency management system that employs a logical management structure, defined responsibilities; clear reporting channels and a common nomenclature to help unify hospitals with other emergency responders.

HHS - Department of Health and Human Services (US).

High-Hazard Areas – geographic locations that for planning purposes have been determined through historical experience and vulnerability analysis to be likely to experience the effects of a specific hazard (e.g., hurricane, earthquake, hazardous materials accident, etc.) resulting in vast property damage and loss of life.

HIPAA – Health Insurance Portability and Accountability Act.

ICS – Incident Command System - The direction and control scheme used by first response and other agencies to manage emergencies.

Incident Management – referring to the totality of activities to be aware of, prevent, prepare for respond to, and recover from incidents. This term is emphasized in the National Response Plan and replaces the terms: Emergency Management, Disaster Management, Crisis Management, and Consequence Management.

Laboratory Biosafety Levels – four biosafety levels for activities involving infectious microorganisms and laboratory animals. BSL 1 - suitable for work involving well characterized agents not known to consistently cause disease in healthy adult humans, and of minimal potential hazard to laboratory personnel and the environment. BSL 2 – similar to BSL 1 and is suitable for work involving agents of moderate potential hazard to personnel and the environment. BSL 3 – applicable to clinical, diagnostic, teaching, research, or production facilities in which work is done with indigenous or exotic agents which may cause serious or potentially lethal disease as a result of exposure by the inhalation route. BSL 4 – required for work with dangerous and exotic agents that pose a high individual risk of aerosol-transmitted laboratory infections and life-threatening disease.

Laboratory Levels (A, B, C, D) – a system for classifying laboratories by their capabilities. Classifications are: A - routine clinical testing. Includes independent clinical labs and those at universities and community hospitals; B - more specialized capabilities. Includes many state and local public health laboratories; C - more sophisticated public health labs and reference labs such as those run by CDC; and D - possessing sophisticated containment equipment and expertise to deal with the most dangerous, virulent pathogens and includes only CDC and Department of Defense labs, the FBI, and the U.S. Army Medical Research Institute of Infectious Diseases.

MMRS – Metropolitan Medical Response System – (DHS) A program intended to increase cities' ability to respond to a terrorist attack by coordinating the efforts of local law enforcement, fire, hazmat, EMS, hospital, public health and other personnel.

N95 – filtering characteristic of an effective mask, resistant to aerosol hazards.

NEDSS – National Electronic Disease Surveillance System - a Centers for Disease Control and Prevention initiative promoting the use of data and information system standards to improve disease surveillance systems at federal, state and local levels.

Negative Pressure Isolation Room – a room, which has negative air pressure in relation to the corridor and surrounding areas with exhaust externally vented away from air intakes or where people may pass.

NIIMS – National Interagency Incident Management System – the single all-hazard incident management system that includes the Incident Command System that is currently in place and that will be replaced by the National Incident Management System in 2005.

NIMS – National Incident Management System – the single all-hazard incident management system required by Homeland Security Presidential Directive 5 that will govern the management of the National Response Plan. The National Incident Management System will replace the National Inter-Agency Incident Management System.

NRP – National Response Plan (US) – the single all-hazard incident management plan, required by Homeland Security Presidential Directive 5 that will govern all incident management beginning in 2005. The National Response Plan will replace multiple specific purpose response plans currently in use.

Nuclear Blast – an explosion due to nuclear fission or fusion, with intense light and heat, a damaging pressure wave, and widespread radioactive material that can contaminate the air, water, and ground surfaces for miles around.

Outbreak – the occurrence of a number of cases of a disease or condition in any area over a given period of time in excess of the expected number of cases.

PHIN – Public Health Information Network - standards providing the basis for information technology projects for CDC-funded programs including NEDSS, HAN, and others.

PPE – Personal Protective Equipment.

Preparedness – refers to the existence of plans, procedures, policies, training, and equipment necessary at the Federal, State, and local levels to maximize the ability to prevent, respond to, and recover from major events. “Readiness” is used interchangeably with “Preparedness.” (HSPD-8).

Public Health – organized efforts of society to protect, promote, and restore people's health. It is the combination of science, skills, and beliefs that is directed to the maintenance and improvement of the health of all the people through collective or social actions. The programs, services and institutions involved emphasize the prevention of disease and the health needs of the population as a whole. Public health activities change with variations in technology and social values but the goals remain the same: to reduce the amount of disease, premature death, and disease-produced discomfort and disability in the population. Public health is thus a social institution, a discipline and a practice.

Public Health Emergency - occurrence or imminent threat of exposure to an extremely dangerous condition or a highly infectious or toxic agent, including a communicable disease, that poses an imminent threat of substantial harm to the population, or any portion thereof. In general, a public health emergency is one that requires a population-based approach. Examples of public health emergencies may include a natural outbreak of an infectious disease, i.e., influenza, Hantavirus, meningitis, salmonella, etc., intentionally caused biological threats such as smallpox, anthrax, and some accidents involving hazardous materials that threaten the health of the population. Public health emergencies can also be or evolve into medical emergencies. Likewise, medical emergencies can develop to an extent that they affect the population's health, and by definition, become public health emergencies. Response to public health emergencies will be led by the Department of Health with assistance by local and State emergency management.

Push Package – a large shipment of medical supplies and pharmaceuticals sent from the Strategic National Stockpile to a state undergoing an emergency within 12 hours of federal approval of a request by the state's Governor.

Quarantine – precautionary physical separation of persons who have or may have been exposed to a threatening communicable disease or a potentially threatening communicable disease and who do not show signs or symptoms of a threatening communicable disease, from non-quarantined persons, to protect against the transmission of the disease to non-quarantined persons.

Radiation – high-energy particles or gamma rays that are emitted by an atom as the substance undergoes radioactive decay. Particles can be either charged alpha or beta particles or neutral neutron or gamma rays.

Response – activities to address the immediate and short-term effects of an emergency or disaster. Response includes immediate actions to save lives, protect property, and meet basic human needs as well as executing the plan and resources created to preserve life, protect property and provide services.

Risk – a measure of the harm to human health that results from being exposed; uncertainty that surrounds future events and outcomes.

Risk Assessment – a process that involves determining the likelihood that a specific adverse health effect will occur in an individual or population, following exposure to a hazardous agent.

Risk Communication - exchange of information concerning the existence, nature, form, severity or acceptability of health or environmental risks. Effective risk communication involves determining the types of information that interested and affected parties need and want, and presenting this information to them in a useful and meaningful way.

Smallpox – variola, a virus that causes a serious, contagious and sometimes fatal disease, producing substantial morbidity and mortality. There is no specific treatment for smallpox and the only prevention is vaccination.

Strategic National Stockpile (SNS) - a national cache of drugs, vaccines, and supplies that can be deployed to areas struck by disasters, including bioterrorism. (US)

Special Populations – people who might be more sensitive or susceptible to exposure to hazardous substances because of factors such as age, occupation, sex, or behaviors (for example, cigarette smoking); populations with special needs for translations, special services or alternative channels of communication (such as the deaf); populations with distinct cultural or community needs. Children, pregnant women, and older people are often considered special populations.

Stakeholder - an individual, group, or organization that may be affected by or otherwise interested in a risk management decision.

Surge Capacity – the accommodation by the health system to a transient sudden rise in demand for health care following an incident with real or perceived adverse health effects. As neither the risk of surge nor the size of surge can be estimated, neither can surge capacity be estimated. The proper approach to surge is surge management planning rather than surge capacity planning.

Surveillance – the systematic ongoing collection, collation, and analysis of data and the timely dissemination of information to those who need to know so that action can be taken. Surveillance is the essential feature of epidemiological practice.

Surveillance of Disease – scrutiny of all aspects of occurrence and spread of a disease that are pertinent to effective control. Included are the systematic collection and evaluation of: morbidity and mortality reports; special reports of field investigations of epidemics and of individual cases; isolation and

identification of infectious agents by laboratories; data concerning the availability, use and untoward effects of vaccines and toxoids, immune globulins, insecticides, and other substances used in control; information regarding immunity levels in segments of the population; and other relevant epidemiologic data.

Terrorism – the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

Threatening Communicable Disease – term used in relation to the reporting of communicable diseases in the Public Health Act and defined in the Public Health Emergency Response Act to mean: a disease that causes death or great that passes from one person to another and for which there are no means by which the public can reasonably avoid the risk of contracting the disease. The term does not include infection with the human immunodeficiency virus (HIV), acquired immune deficiency syndrome (AIDS), or other infections attributable to infection with HIV. (Contrast with conditions of public health significance).

USDA - Department of Agriculture (US).

VA – Veterans Affairs (US).

Vaccination – the injection, or inoculation, of a vaccine for the purpose of inducing active immunity.

Virus – the simplest type of microorganisms, lacking a system for their own metabolism. They depend on living cells to multiply and cannot live long outside of a host. Types of viruses include smallpox, Ebola, Marburg, and Lassa fever.

Weapon of Mass Destruction (WMD) – a WMD is any device, material, or substance used with intent to cause death or serious injury to persons or significant damage to property.

Sources

Agency for Toxic Substances and Disease Registry (ASTDR) Glossary
<http://www.atsdr.cdc.gov/glossary.html>

Army Smallpox Acronym List
<http://www.smallpox.army.mil/resource/SMAplan/doc/J1aResources.doc>

Center for Disease Control Environmental Chemical Glossary
<http://www.cdc.gov/nceh/dls/report/PDF/CompleteReport.pdf>

EPA Risk Communication Toolkit Glossary
www.epa.gov/superfund/tools/pdfs/37riskcom.pdf.

FEMA Acronyms

<http://www.fema.gov/regions/ix/env/acronym.shtm>

FEMA All Hazard Operation Planning Glossary

<http://www.fema.gov/rrr/gaheop.shtm>

Homeland Security Presidential Directive (HSPD) 8 National Preparedness; 12/17/03

<http://www.whitehouse.gov/news/releases/2003/12/print/20031217-6.html>

National Response Plan Glossary

http://www.nemaweb.org/docs/national_response_plan.pdf

NIIMS Incident Command System Glossary

<http://www.w0ipl.com/ECom/icsterms.htm>

Ready.Gov Glossary

<http://www.ready.gov/glossary.html>

ATTACHMENT C – GRANTS MANAGEMENT – DEFINITIONS AND TERMS AND FREQUENTLY ASKED QUESTIONS

Definitions and Terms

Advance - A payment made by Treasury check or other appropriate payment mechanism to a recipient upon its request either before cash disbursements are made by the recipient or through the use of predetermined payment schedules. Most advance payments are processed through the Payment Management System (PMS), the Department's centralized grants payment system. Advance payments are made to recipient organizations upon their requests before cash disbursements are made by them on their assistance programs.

Allocable Cost - A cost is allocable to a particular cost objective (i.e., a specific function, grant project, service, department, or other activity) in accordance with the relative benefits received. A cost is allocable to a Government award where it is treated consistently with other costs incurred for the same purpose in like circumstances and (1) is incurred specifically for the award; or (2) benefits both the award and other work and can be distributed in reasonable proportion to the benefits received; or (3) is necessary to the overall operation of the organization.

Allocation – The process of assigning a cost, or group of costs, to one or more cost objectives, in reasonable and realistic proportion to the benefit provided or other equitable relationship.

Allowable Cost – A cost incurred by a recipient that is:

- (1) reasonable for the performance of the award;
- (2) allocable;
- (3) in conformance with any limitations or exclusions set forth in the Federal cost principles applicable to the organization incurring the cost or in the Notice of Grant Award as to types or amount of cost items;
- (4) consistent with internal regulations, policies and procedures that apply uniformly to both Federally-financed and other activities of the organization;
- (5) accorded consistent treatment;
- (6) determined in accordance with generally accepted accounting principles; and
- (7) not included as a cost in any other Federally-financed grant (unless specifically authorized).

Approved Budget – The recipient's financial expenditure plan, including any revisions approved by the awarding office, for carrying out a grant-supported project or activity. The approved budget includes

Federal funds and may require non-Federal participation, the amount of which is specified on the initial award document and on any subsequent revised or amended award notice.

Assurance – A certification by an applicant normally included with the application or State plan that will abide by a particular requirement if awarded a Federal grant.

Award – Financial assistance that provides support or stimulation to accomplish a public purpose. Awards included grants and other agreements in the form of money or property in lieu of money, by the Federal Government to an eligible recipient. The term does not include: technical assistance, which provides services instead of money; other assistance in the form of loans, loan guarantees, interest subsidies, or insurance; direct payments of any kind to individuals; and contracts which are required to be entered into and administered under procurement laws and regulations.

Budget Period – The intervals of time into which a multi-year period of assistance (project period) is divided for budgetary and funding purposes. Budget periods are usually 12 months long but may be shorter or longer, if appropriate.

Capital Expenditure – The cost of an asset, including the cost to put it in place. Capital expenditure for equipment, for example, means the net invoice price of the equipment, including the cost of any modifications, attachments, accessories, or auxiliary apparatus necessary to make it usable for the purpose for which it was acquired. Ancillary changes, such as taxes, duty, protective in-transit insurance, freight, and installation may be included in, or excluded from, capital expenditure cost in accordance with the recipient organization's regular accounting practices.

Carryover Balance – Unobligated funds of the recipient from a previous funding period under a grant that are authorized for use to cover allowable costs in a current funding period.

Code of Federal Regulations (CFR) – The codified regulations of the Federal Government containing a codification of the final agency regulations published in the Federal Register. The primary Departmental grants administration regulations are found in Title 45 CFR Part 74, "Grants and Agreements (Including Subgrants) with Institutions of Higher Education, Hospitals, Other Non-Profit, and Commercial Organizations" and 45 CFR Part 92, "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments." Other significant regulations related to grants administration include 45 CFR Part 16, "Procedures of the Departmental Grant Appeals Board," Part 76, "Government wide Debarment and Suspension (Nonprocurement) and Government wide Requirements for Drug-Free Workplace (Grants)," and Part 95, "General Administration – Grant Programs (Public Assistance and Medical Assistance)."

Cooperative Agreement - An award instrument of financial assistance where "substantial involvement" is anticipated between the HHS awarding agency and the recipient during performance of the contemplated project or activity. "Substantial involvement" means that the recipient can expect Federal programmatic collaboration or participation in managing the award.

Direct Costs – Those costs that can be specifically identified with a particular project, program, or activity.

Federal Grant and Cooperative Agreement Act of 1977 – The Act (31 U.S.C. 6301 et seq.) which establishes guidelines for distinguishing Federal assistance relationships from Federal procurement relationships. It clarifies the difference between acquisition and assistance and requires the use of grants or cooperative agreements for the provision of general financial assistance whereas contracts are used to acquire goods or services for the direct benefit and use of the government.

Financial Status Report (FSR) – A standard, Federal Government form, SF269 (long form) or SF-269A (short form), used to monitor the financial progress of the grant and show the status of funds in non-construction programs. Both forms provide data by grant budget period and contain information on total outlays (Federal and recipient shares) and unobligated recipient balances. The long form is used for grants that involve cost sharing/matching or program income. The short form may be authorized for use in grants that do not have these types of financial activity.

Grants Management Specialist – A Federal staff member who oversees the business and other non-programmatic aspects of one or more grants and/or cooperative agreements. These activities include, but are not limited to, evaluating grant applications for administrative content and compliance with regulations and guidelines, negotiating grants, providing consultation and technical assistance to recipients, post-award administration and closing out grants.

Indirect Costs – Those costs that are incurred for common or joint objectives and therefore cannot be identified readily and specifically with a particular sponsored project, program, or activity but are nevertheless necessary to the operations of the organization. For example, the cost of operating and maintaining facilities, depreciation, and administrative salaries are generally treated as indirect costs.

Notice of Grant Award (NGA) – The official award document, signed by the Grants Management Officer, or his or her delegate, that:

- (1) notifies the recipient of the award of a grant;
- (2) contains or references all the terms and conditions of the grant and Federal funding limits and obligations; and,
- (3) provides the documentary basis for recording the obligation of Federal funds in the Department's accounting system.

Obligations by Recipients – The amounts of orders placed, contracts and subgrants awarded, goods and services received, and similar transactions during a funding period that will require payment during the same or a future period.

Payment Management System (PMS) – The HHS centralized grants payment system. Most HHS, and some other Federal Government agencies', recipients are paid through this systems.

Prior Approval – The written permission provided by the authorized granting official from the HHS awarding office before the recipient may undertake certain activities (such as performance or modification of an activity), expend funds, or exceed a certain dollar level (e.g. re-budget twenty-five percent or more of the total award.)

Recipient or Grantee – The entity receiving financial assistance directly, in the form of a grant or cooperative agreement, from a Federal agency to carry out a project or program. Although grant funding and benefits may be limited to a particular site or component of a larger entity, the entire legal entity that received the award is legally responsible for carrying out a program or project, even if the grant award document refers only to the particular site or component.

Supplant – To replace funding of a recipient's existing program with funds from a Federal grant, usually a mandatory grant statutes and regulations frequently prohibit this practice.

Terms and Conditions – All requirements imposed on a recipient by the Federal awarding agency, whether by statute, regulation, or within the grant award document itself. The terms of award may include both standard and special provisions, appearing on each Notice of Grant Award, that are considered necessary to attain the objectives of the grant, facilitate postaward administration of the grant, conserve grant funds, or otherwise protect the Federal Government's interests.

Unliquidated Obligation –

- (1) For reports prepared on a cash basis, the amount of obligations incurred by the recipient that has not been paid; and
- (2) For reports prepared on an accrued expenditure basis, the amount of obligations incurred by the recipient for which an outlay has not been recorded.

Unobligated Balance – The portion of the funds authorized by the Federal agency that has not been obligated by the recipient.

Frequently Asked Questions

1. When are the Final Financial Status Reports due?

Answer: 90 days after the end of the budget period.

2. Do awardees need to report program expenditures by benchmarks on the FSR?

Answer: No. Only the entire authorized award amount is to be reported on the FSR.

3. Do awardees have to get approval on equipment purchases over \$25,000?

Answer:

- a) If this equipment was originally requested in the budget then no further approval is required.
- b) If this is an additional purchase and the dollar amount represents up to 25% of the award then no prior approval is required. If the dollar amount represents more than 25% of the award then approval is required.
- c) All proposed equipment must meet the scope of work of the application.

4. What will be the policy in terms of ownership of any equipment?

Answer: In accordance with the Code of Federal Regulations (CFR), Title 45 Part 92 for State and Local Governments, "Subject to the obligations and conditions set forth in this section, title to equipment acquired under a grant (or cooperative agreement) or sub-grant will vest upon acquisition in the grantee or sub-grantee respectively." "A State will use, manage, and dispose of equipment acquired under a grant by the State in accordance with State laws and procedures."

5. Will hospital entities need to maintain inventory of the items purchased with cooperative agreement funds?

Answer: Yes. The information contained in the answer to 6 below should be maintained by hospitals or other entities and be readily available to the awardee office for reporting purposes.

6. At the end of the grant, will equipment need to be accounted for as part of grant close-out?

Answer: Yes. At the time of close out of the cooperative agreement, the Grants Management Official (GMO) requires final reports, one of which is a "Listing of Equipment Purchased with Grant Funds". If equipment has been purchased under this grant, a listing of each item is required. The list should include for each item: 1) acquisition date, (2) description of equipment with manufacturer's model and serial number, if any, (3) acquisition cost and amount charged to the grant, (4) location and condition of equipment, and (5) a statement of anticipated need and use of equipment if retained by your agency. If no equipment has been purchased, provide a statement to that effect."

7. At the end of the grant, will there be the possibility that the equipment will have to be turned over to the federal government or another specified entity?

Answer: Most likely not. Per statement 5 above, a statement of anticipated need and use of equipment if retained by your agency will need to be submitted to the grants specialist.

8. If throughout the course of the cooperative agreement awardees need to re-budget funds is prior approval required?

Answer: Up to 25% of the award may be re-budgeted within the approved scope of work, without approval of the program. **However, an explanation of why re-budgeting occurred, a statement reflecting the amount of money re-budgeted and a revised budget must be submitted to the grants specialist and Project officer for official tracking purposes. The grants specialist will acknowledge receipt of the revised budget documents.**

If more than 25% of the award is being re-budgeted then grants specialist and program approval is required.

9. Can vehicles be purchased with HRSA cooperative agreement funds?

Answer: Requests for Vehicle purchases are considered on a case by case basis.

Justifications to purchase vehicles are very detailed and must be made far in advance of consideration of purchases. Awardees may request funds for leasing purposes but they have to justify the expenses for leasing as well. Leasing a vehicle is more advantageous to the government and thus the preferred method of attaining vehicles when needed.

ATTACHMENT D – REFERENCES

For additional information please visit our website at <http://www.hrsa.gov/bioterrorism/index.htm>

Abernathy JH 3rd, McGwin G Jr, Acker JE 3rd, Rue LW 3rd. (February 2002). Impact of a voluntary trauma system on mortality, length of stay, and cost at a level I trauma center. *American Surgeon*. 68(2):182-92.

“Acute Care Center—A Mass Casualty Strategy for Biological Terrorism Incident”. (May 1, 2001). Biological Weapons Improved Response Program, U.S. Army Soldier and Biological Chemical Command (SBCCOM), Department of Defense.

Auf der Heide E, *Disaster Response: Principles of Preparation and Coordination* (St. Louis: Mosby, 1989).

Barbera JA, Macintyre AG, & DeAtley CA. (March 2002) “Ambulances to Nowhere: America’s Critical Shortfall in Medical Preparedness for Catastrophic Terrorism,” *Journal of Homeland Security*.

Barbera J, McIntyre A, Gostin L, Inglesby T, O’Toole T, DeAtley C, Tonat K, & Layton M; “Large-Scale Quarantine Following Biological Terrorism in the United States,” *Journal of the American Medical Association*, vol. 286, no. 21, 5 Dec. 2001, pp. 2711–2717.

Benedek DM, Holloway HC, Becker SM. (2002). Emergency health management in bioterrorism events. *Emergency Medicine Clinics of North America*. 20(2): 393-407.

Bowd DR, Cowley RA (1983). Comprehensive regional trauma/emergency medical services (EMS) delivery systems: The United States experience. *World Journal of Surgery*. 7(1): 149-157.

Bravata DM, McDonald KM, Owens DK, Wilhelm ER, Brandeau ML, Zaric GS, Holty JEC, Liu H, Sundaram V. *Regionalization of Bioterrorism Preparedness and Response*. Summary, Evidence Report/Technology Assessment No. 96. (Prepared by Stanford–University of California San Francisco Evidence-based Practice Center.) AHRQ Publication No. 04-E016-1. Rockville, MD: Agency for Healthcare Research and Quality. April 2004.

Burda AM, Sigg T, “Pharmacy Preparedness for Incidents Involving Nuclear, Biological or Chemical Weapons”, *Journal of Pharmacy Practice*, April 2000, 13(2):141-55.

Cosgrove SE, Jenckes MW, Kohri D, Hsu EB, Green G, Feuerstein CJ, Catlett CL, Robinson KA, Bass EB. *Evaluation of Hospital Disaster Drills: A Module-based Approach*. Prepared by Johns Hopkins University Evidence-based Practice Center under Contract No.290-02-0018.

AHRQ Publication No. 04-0032. Rockville, MD: Agency for Healthcare Research and Quality. April 2004

DiGiovanni C. (1999). Domestic terrorism with chemical or biological agents: psychiatric aspects. *American Journal of Psychiatry*. 156(10): 1500-1505.

Eastman AB, Lewis FR, Champion HR, Mattox KL. (1987). Regional trauma system design: Critical concepts. *American Journal of Surgery*. 154(1): 79-87.

Frase-Blunt M, “Operation Topoff 2’ Bioterrorism Exercise Offers Educational Lessons,” *AAMC (Association of American Medical Colleges) Reporter*, Aug. 2003.

“*Health and Medical Response System: Response Team Description Manual.*” (May 1999). Office of Emergency Preparedness, Department of Health and Human Services

Hicks, JL , Leitheiser A. Integrated planning for disaster. A model for Minnesota hospitals. *Minnesota Medicine*, August 2002, 85(8):44-7.

Hicks JL, Penn P, Hanfling D, Lappe MA, O’Laughlin D, & Burstein JL, “Establishing and Training Health Care Facility Decontamination Teams,” *Annals of Emergency Medicine*, vol. 42, no. 3, Sep. 2003, pp. 381–390.

“Hospital Preparedness for Mass Casualties: Summary of an Invitation Forum,” final report, August 2000; summary of an invitational forum convened 8–9 March 2000 by the American Hospital Association with the support of the Office of Emergency Preparedness, U.S. Department of Health and Human Services.

Hospital Preparedness: Most Urban Hospitals Have Emergency Plans but Lack Certain Capacities for Bioterrorism, General Accounting Office Report 03-924, August 2003.

MacKenzie EJ, Steinwachs DM, Ramzy AI. (1990). Evaluating Performance of Statewide Regionalized Systems of Trauma Care. *Journal of Trauma*. 30(6): 681-688.

Mann NC, Mullins RJ, MacKenzie EJ, Jurkovich GJ, Mock CN. (September 1999). Systematic review of published evidence regarding trauma system effectiveness. *The Journal of Trauma*. 47(3 Suppl): S25-33.

Marcus, LJ. (2002). *Israel's preparedness for responding to the health requirements of its civilian population in the event of deployment of a nuclear, biological or chemical weapon of mass destruction. A report on meetings and interviews.* Boston, MA: Harvard University, School of Public Health.

Milsten A, “Hospital Responses to Acute-Onset Disasters: A Review,” *Prehospital and Disaster Medicine*, vol. 15, no. 1 (Jan.–March 2000), pp. 32–45.

Mullins RJ, Veum-Stone J, Hedges JR, Zimmer-Gembeck MJ, Mann NC, Southard PA, Helfand M, Gaines JA, Trunkey DD. (1996). Influence of a statewide trauma system on location of hospitalization and outcome of injured patients. *Journal of Trauma: Injury, Infection, and Critical Care*. 40(4): 536-545.

Mullins RJ, Mann NC, Hedges JR, Worrall W, Jurkovich GJ. (1998). Preferential benefit of implementation of a statewide trauma system in one of two adjacent states. *Journal of Trauma: Injury, Infection, and Critical Care*. 44(4): 609-616.

Mullins RJ, Mann NC. (1999). Population-based research assessing the effectiveness of trauma systems. *Journal of Trauma: Injury, Infection, and Critical Care*. 47 (3): 59-66.

Nathens AB, Jurkovich GJ, Rivara FP, Maier RV. (January 2000). Effectiveness of state trauma systems in reducing injury-related mortality: a national evaluation. *The Journal of Trauma*. 48(1) :25-30; discussion 30-1.

National Disaster Medical System's lecture titled: "Health Consequences and Response" by Paul Rega, M.D. and Richard Bissell, Ph.D.

Pesik N, Keim ME, & Iserson KV, "Terrorism and the Ethics of Emergency Medical Care," *Annals of Emergency Medicine*, vol. 37, no. 6, Aug. 1999, June 2001, pp. 642-646.

Rothstein MA, Alcalde MG, Elster NR, Majumder MA, Palmer LI, Stone TH, & Hoffman RE, Institute for Bioethics, Health Policy and Law, University of Louisville School of Medicine, "Quarantine and Isolation: Lessons Learned From SARS," a report to the Centers for Disease Control and Prevention, November 2003.

Rubin JN, "Recurring Pitfalls in Hospital Preparedness and Response," *Journal of Homeland Security*, January 2004.

Scales DC, Green K, Chan AK, Poutanen SM, Foster D, Nowak K, Raboud JM, Saskin R, Lapinsky SE, & Stewart TE, "Illness in Intensive Care Staff After Brief Exposure to Severe Acute Respiratory Syndrome," *Emerging Infectious Diseases*, vol. 9, no. 10, Oct. 2003, pp. 1205-1210.

Treat KN, Williams JM, Furbee PM, Manley WG, Russell FK, & Stamper CD, "Hospital Preparedness for Weapons of Mass Destruction Incidents: An Initial Assessment," *Annals of Emergency Medicine*, vol. 38, no. 5, Nov. 2001, pp. 562-565.

"Top Officials (TOPOFF) Exercise Series: TOPOFF 2 After Action Summary Report for Public Release," U.S. Dept. of Homeland Security, 19 Dec. 2003.

"17 Critical Benchmarks for Bioterrorism Preparedness Planning," Dept. of Health and Human Services press release, 6 June 2002.

